

VII.—*General William Roy and his 'Military Antiquities of the Romans in North Britain'.* By GEORGE MACDONALD, Esq., C.B., F.B.A., LL.D., a Local Secretary for Scotland.

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MORE than a hundred and twenty years ago the Society of Antiquaries of London conferred a great and lasting obligation on students of the history of Scotland during the Roman period. At its own charges, and without reasonable hope of pecuniary return, it published in a splendid folio the manuscripts and drawings that had been handed over to it by the executors of Major-General Roy. The pomp and circumstance surrounding the issue immediately secured for *The Military Antiquities of the Romans in North Britain* the place which it has ever since held in public esteem—a place to which, upon the whole, its intrinsic merits fairly entitle it. Roy was at once a zealous antiquary and a shrewd and capable observer, with a thorough knowledge of military engineering. It is true that the data on which his main thesis rests were too slight to support the elaborate superstructure of which they were made the basis. It is true also that his treatment of a large part of his subject was vitiated by his seemingly implicit belief in the genuineness of Bertram's egregious hoax, the *De Situ Britanniae*.¹ Still, when every allowance has been made for the defects that inevitably resulted, his book remains one of our archaeological classics. As a storehouse of trustworthy topographical information regarding Roman sites, it can never be entirely superseded.

The permanent value which it possesses is due mainly to its careful plans, which preserve for us the outline of numerous entrenchments long since grievously mutilated or altogether destroyed. The text, on the other hand, is but seldom referred to. And, indeed, it might at first sight appear that it has little to teach us, save a respect for the author's modesty and fairness of mind, and for the scientific spirit in which he confronts the problems that he sets himself

¹ Only in one passage is there any hint of a doubt. This is in *Mil. Ant.*, p. 134, where he says that a certain discrepancy is "rather unlucky, as seeming to lessen the dependance we were willing to place on the supposed genuineness of these ancient fragments".

to solve. Some of the chapters are so permeated by the pernicious influence of the *De Situ Britanniae* that it seems sheer waste of time to read them. Others are wholly occupied by more or less speculative calculations regarding the number of troops of various kinds that could be accommodated within a given area, discussions of those 'rules of castrametation' that loomed so large on the mental horizon of eighteenth-century antiquaries. There is far less in the way of actual description of sites than a more modern treatise of similar character might be expected to contain, doubtless because Roy, as a skilled draughtsman, felt that for such purposes it was safer to trust to his pencil than to his pen.¹

Here his judgement was probably sound. At all events, the bulk of the drawings were finished first, and form a *corpus* which might quite fairly be regarded as a thing by itself; only a few of them were specially designed to illustrate the text. The latter is, in the main, of the nature of an afterthought. Nevertheless it would be a mistake to ignore it. Carefully studied, it throws an interesting light on the circumstances in which the plans of camps were made, and so helps substantially towards their proper understanding. During the course of a recent re-reading, certain points that had previously been noted as trifling inconsistencies were found to assume an importance which suggested that the Editorial Committee had performed their task conscientiously indeed, but without any grasp of the subject-matter and therefore in a more or less mechanical fashion. Further investigation seemed desirable. The two copies of the manuscript which the Committee mention are still in existence—one in the Society's Library and the other in the British Museum. Thanks to the courtesy and kindness of the responsible officials,² it proved possible not only to examine them both, but to place them side by side for the sake of convenient and more thorough comparison. The scrutiny was illuminating. The number of new facts revealed exceeded anticipation. Taken along with other material, they enable the story of Roy's activities in the sphere of Roman studies to be reconstructed with some approach to completeness. This is what I propose to attempt now, reserving the details of the collation for an Appendix. Incidentally, there will be occasion here and there to supplement or, it may be, to correct the various notices of Roy's career that have hitherto been published. We shall find that even the fullest and best of these—the sketch by the late Colonel

¹ Thus, after referring to his plate of the Antonine Wall and its stations, he says that "a short description may suffice, since from a plan of this kind, topographically expressed, a much truer notion may be obtained of the isthmus in general, of every essential particular relating to the wall, and of the military reasons by which the Romans were governed in conducting this boundary of their empire, than what, without such assistance, could possibly be conveyed in many words" (*Mil. Ant.*, pp. 155 f.).

² Mr. C. R. Peers and Mr. H. S. Kingsford of the Society of Antiquaries, and Mr. G. F. Hill and Mr. D. T. B. Wood of the British Museum, have helped me not only in this but in many other ways.

Vetch, C.B., in the *Dictionary of National Biography*—is not wholly free from serious blemishes.

William Roy was a native of Carluke in Lanarkshire. The parish records¹ show that his parents—John Roy of Miltonhead, factor or land-steward to Sir William Gordon of Milton, and Mary Stewart—were married in July 1722, and that he himself was born on 4th May 1726. He had two sisters, Grizel and Susanna, born in 1723 and 1728 respectively, and one brother, James, born in 1730. The two lads are said to have received the beginnings of their education at the parish school of Carluke, afterwards proceeding to the grammar-school of Lanark,² where we may suppose that they were soundly drilled in the rudiments of Latin and mathematics. James matriculated at the University of Glasgow in 1742—in those days twelve was a common enough age for entry upon undergraduate life in Scotland—and took his Master's degree five years later. He ultimately entered the Church, dying in 1767 as minister of Prestonpans in East Lothian.³ As to the earlier stages of William's after-school life, nothing definite seems to be known. But, when we next catch sight of him, he comes clearly into view as one of the central figures in an enterprise that was destined to influence his whole future most profoundly. In the obituary notice which appeared in the *Gentleman's Magazine* immediately after his death in July 1790, there occurs the following passage:

"While colonel of artillery, he and his engineers, under Col. Watson, in the winter of 1746, made an actual survey of Scotland, which goes under the name of the Duke of Cumberland's Map, on a very large scale, most accurately pointing out every the [*sic*] smallest spot, with the Roman camps, &c., the original of which is in the Ordnance-office."⁴

The date, as we shall see presently, is wrong, and the description of the map claims for it a completeness to which Roy himself would never have pretended. But the most astonishing blunder, frequently repeated by subsequent biographers, is the statement that in 1746 the future general, who was then a stripling of twenty and who was never at any time of his life in the gunners, was already a colonel of artillery.⁵ In 1810 a very different account of the matter

¹ Now preserved in the General Register House, Edinburgh, where I have had an opportunity of consulting them.

² *Proc. Soc. Ant. Scot.*, i, p. 148.

³ W. Innes Addison, *Matriculation Albums of the Univ. of Glasgow*, p. 29, no. 991.

⁴ *Op. cit.*, vol. lx, p. 670.

⁵ Attention was first drawn to the mistake by Mr. D. R. Rankin in *Proc. Soc. Ant. Scot.*, ix, p. 564. It may be of interest to supplement Mr. Rankin's correction by indicating the source of the error. The writer in the *Gentleman's Magazine* was merely copying, in a singularly unintelligent way, a notice which had appeared in Roy's own lifetime in Gough's *British Topography* (1780), Roy being then a

was given to the world by George Chalmers in the second volume of his *Caledonia*.¹ To a paragraph which opens with the assertion that "in speaking of those surveys more is commonly attributed to the scientific labours of the late Major-General William Roy than accurate inquiry will fully warrant", there is appended this characteristic foot-note:

"In 1747, when those surveys began, William Roy left the post-office at Edinburgh, when he was about the age of one and twenty. He now acted for some time as clerk to Lieutenant-Colonel Watson, who, from the recommendation of M. Gen. Napier to the Duke of Cumberland, was employed as superintendent of the whole survey. Roy, after a while, joined the surveying engineers, under the patronage of Colonel Watson; and, from his predetermination of mind and habitual application, he became an excellent surveyor and an admirable draughtsman. He never was admitted into the Royal Academy at Woolwich as a gentleman cadet, nor was he ever of the drawing-room in the Tower; but he was probably adopted as a *practitioner* in the new establishment of the engineer department, dated the 11th April, 1748.² In March, 1759, he was merely a sub-engineer, with the rank of lieutenant. He remarkably distinguished himself at the battle of Thornhausen, on the 1st of August, 1759. The praise of Prince Ferdinand, the illustrious commander of the allied army, supported Roy throughout his whole service. He soon became captain of engineers and major. He was made deputy quarter-master in 1762, with the rank of lieutenant-colonel in the army. The peace of Paris immediately ensued, when Colonel Roy returned to his *Roman Antiquities*. In 1764, 1769, and in 1771, he appears to have employed much time in these interesting pursuits. In 1774 he constructed, with the help of those surveys, his 'Mappa Britanniae septentrionalis Faciei Romanae', which was drawn by Thomas Chamberlain, the skilful draughtsman of the Tower drawing-room. In 1778, Colonel Roy was appointed commissary general of the whole army, and in 1786, when major-general, he was promoted to the command of the 30th regiment. He died, after two hours' illness, on the 1st of July, 1790, leaving his great work on the Roman Antiquities of Great Britain to the Antiquary Society of London, who published his ingenious labours with more splendour than accuracy. . . . His Roman Antiquities show how little he was acquainted with the Roman localities of North-Britain, but in his antiquarian speculations his sagacity was constantly over-ruled by his system."

colonel in the army and a captain of engineers. The passage (*op. cit.*, ii, p. 585), which is quoted in full *infra*, p. 203, shows that Gough was responsible for the mistake in the date and for the undue glorification of the map, as well as for connecting Roy with the artillery.

¹ p. 64. In the edition of 1888 it is, of course, vol. iii.

² On p. 61 Chalmers had quoted the records of the Privy Council to show that on the date mentioned the Board of Ordnance had represented to the king "the great difficulty of getting proper persons to act as engineers; that the whole establishment of engineers consisted only of 29, of whom 4 were appointed to carry on the works in Scotland". The king immediately approved of an addition to the establishment of six sub-engineers and ten 'practitioners' or probationers.

Those who are familiar with the looseness of Chalmers's own work will find it difficult to have patience with this ungenerous attack upon Roy's memory. And, indeed, it does not deserve detailed discussion. Suffice it to say that an analysis of it would show it to be as rich in inaccuracies as it is in innuendo. So far as these affect the aspect of Roy's life in which we are more immediately interested, the necessary corrections will be supplied as we proceed. In the meantime it will be convenient to begin by recording the facts as to his connexion with the Scottish survey. Fortunately this can be done in his own words:

"The rise and progress of the rebellion which broke out in the Highlands of Scotland in 1745, and which was finally suppressed, by his Royal Highness the late Duke of Cumberland, at the battle of Culloden in the following year, convinced Government of what infinite importance it would be to the State, that a country, so very inaccessible by nature, should be thoroughly explored and laid open, by establishing military posts in its inmost recesses, and carrying roads of communication to its remotest parts. With a view to the commencement of arrangements of this sort, a body of infantry was encamped at Fort Augustus in 1747, under the command of the late Lord BLAKENEY, at that time a Major-General; at which camp my much respected friend, the late Lieutenant-General WATSON, then Deputy Quarter-Master-General in North Britain, was officially employed. This officer, being himself an engineer, active and indefatigable, a zealous promoter of every useful undertaking, and the warm and steady friend of the industrious, first conceived the idea of making a map of the Highlands. As assistant Quarter-Master, it fell to my lot to begin, and afterwards to have a considerable share in, the execution of that map; which being undertaken under the auspices of the Duke of CUMBERLAND, and meant at first to be confined to the Highlands only, was nevertheless at last extended to the Lowlands; and thus made general in what related to the mainland of Scotland, the islands (excepting some lesser ones near the coast) not having been surveyed."

This version of the story may without hesitation be accepted as authentic. It is taken from the Introduction to a highly important paper, entitled 'An Account of the Measurement of a Base on Hounslow-Heath', which Roy read before the Royal Society in 1785, and which was published in the same year in the Society's *Philosophical Transactions*.¹ From it we learn that the idea of constructing a map originated with Watson, and that Roy, so far from joining "after a while", was closely identified with the enterprise from its inception. Thanks mainly to Chalmers, whose official connexion with the Privy Council gave him access to much miscellaneous information, we know the names of various other helpers.² Their whole number was small, but their average of

¹ The extract quoted above will be found on pp. 385 f. (vol. lxxv).

² *Caledonia*, ii (iii), p. 62.

ability must have been uncommonly high. The principal draughtsman, for example, was Paul Sandby, afterwards one of the foundation members of the Royal Academy, whose popular reputation to-day perhaps rests chiefly on his series of etchings of 'The Cries of London'. Again, of the ten assistant engineers whom Chalmers mentions by name, at least four ultimately rose, like their chief, to be general officers. One of these, of course, was Roy. The most distinguished was David Dundas,¹ who before his death attained the rank of Commander-in-Chief of the British army, and was considered "the most profound tactician in England".² We shall hear of him later. In the meantime it will be enough to note that he was a nephew of Watson,³ that he was nine years younger than Roy, and that he did not become associated with the survey of Scotland until 1752.

The results of the labours of Watson and his party were embodied in the sheets that form the so-called Duke of Cumberland's map, now preserved in the British Museum. Examination shows that besides the islands (which were never surveyed at all) some considerable sections of the southern part of the mainland are wanting. It hardly seems likely that the gaps are due to accidental loss. A simpler explanation is that progress was rudely interrupted by the advent of the Seven Years' War, before the whole of the material accumulated in the field could be subjected to the final process of protraction.⁴ Roy's testimony on this point is important:

"Although this work, which is still in manuscript, and in an unfinished state, possesses considerable merit, and perfectly answered the purpose for which it was originally intended; yet, having been carried on with instruments of the common, or even inferior kind, and the sum annually allowed for it being inadequate to the execution of so great a design in the best manner, it is rather to be considered as a magnificent military sketch, than a very accurate map of a country. It would, however, have been completed, and many of its imperfections no doubt remedied; but the breaking out of the war of 1755 prevented both, by furnishing service of other kind for those who had been employed upon it."

The extract just quoted is the immediate continuation of the passage already cited from the *Philosophical Transactions*,⁵ and the criticism implied in the first sentence therefore proceeds from Roy the scientific geographer and geodesist rather than from Roy the professional soldier and antiquary. But Roy the

¹ The other two were Hugh Debbieg and George Morrison.

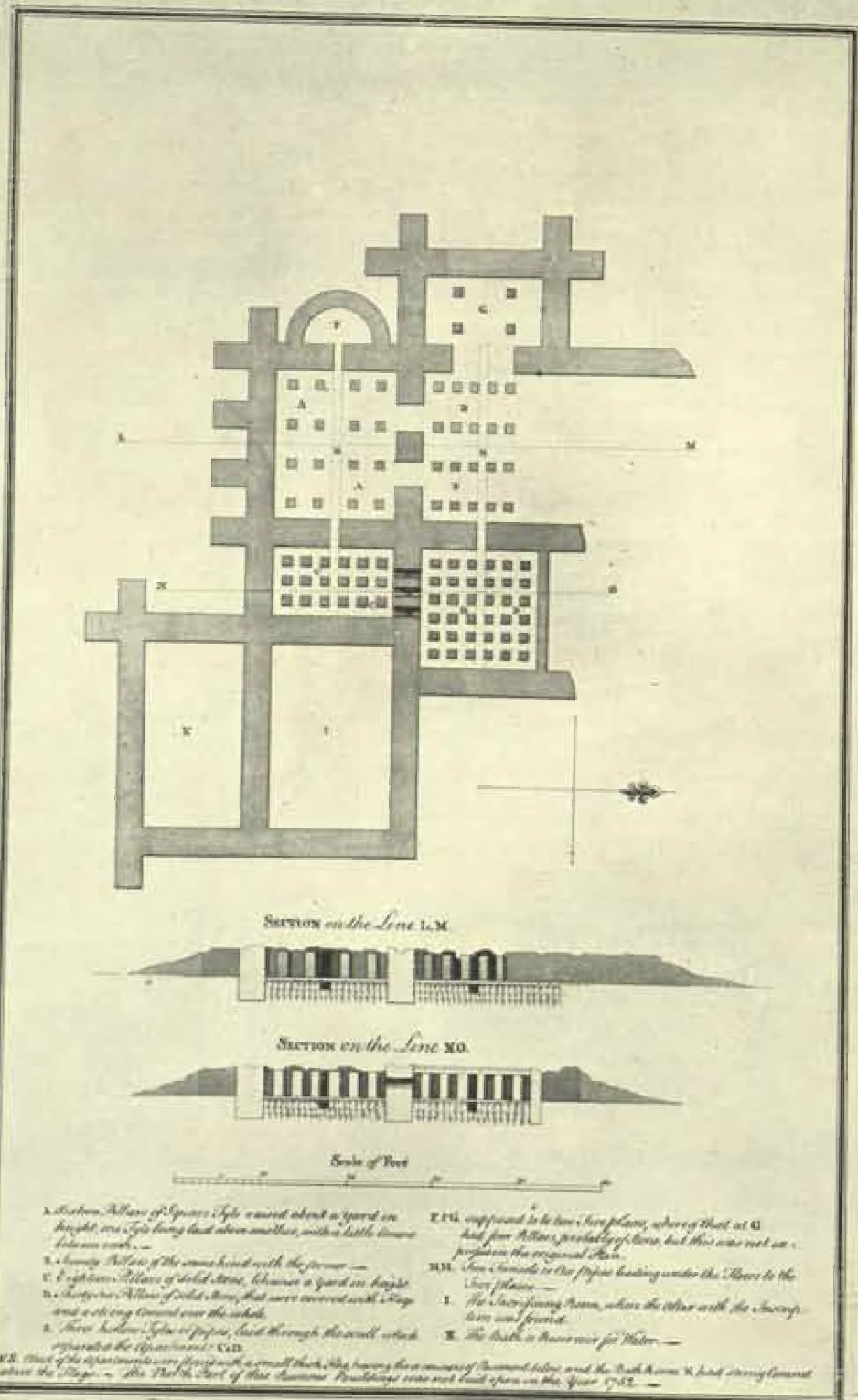
² H. Morse Stephens in *Dict. Nat. Biogr.*, xvi, p. 183.

³ Through an obvious confusion, Porter's *History of the Corps of the Royal Engineers*, vol. ii (London, 1889), speaks of Roy as having been Watson's nephew (p. 229).

⁴ It is the large-scale protractions that are lacking. The reduced maps are more complete.

⁵ Vol. lxxv, pp. 386 f.

PLAN and SECTIONS of a ROMAN BATH discovered in 1752 near the
STATION at NETHERBY on the RIVER ESK.



REVISED PLAN OF THE NETHERBY BATH

From the British Museum MS.

student of Roman Britain was equally frank as to the limitations of the great map from the archaeological point of view. Speaking of the survey in the 'Prefatory Introduction' to his *Military Antiquities*,¹ he commits himself only so far as to say that "though at that early period, the study of Antiquity was but little the object of the young people employed in that service, yet it was not wholly neglected". It certainly was not, so far as Roy himself was concerned. Long before he experienced the special stimulus to be mentioned presently, he proved conclusively that he had the root of the matter in him. In 1752, when the neighbourhood of the river Esk was being surveyed, he heard the story of how the remains of a very fine bath had been discovered twenty years earlier on the site of the Roman station at Netherby. In the interval all traces of the discovery had been swept away. But Roy was so keenly interested that he determined to secure a proper record for himself. After pointing out that it was impossible to take any plan of what no longer existed, he proceeds:

"The plan here referred to was therefore copied from an original drawing, in the possession of the clergyman of Kirk Andrews, situated on the opposite side of the Esk from Netherby; who had taken care, while the workmen were employed in freeing the foundations from the surrounding rubbish, to measure the several parts of the building accurately, whereby its true figure and dimensions were preserved. No sections were, however, annexed to the original; so that these, which now accompany it, were done from description only, with the view of showing more clearly the method the Romans made use of in constructing buildings of this sort."²

Apart from the evidence it supplies as to Roy's natural bent towards archaeology, the explanation is useful as enabling us to assign a definite date to plate xlvii of the *Military Antiquities*, on which the plan of the bath at Netherby (pl. XXVII³) appears. What is more important, the fact that in 1752 he was engaged in surveying the valley of the Esk not only justifies us in attributing to this year the 'Plan and sections of Castle-over in Eskdale-moor', reproduced as plate xxvi, but also opens the way to a further inference. It will be remembered that a survey of Southern Scotland formed no part of Watson's original scheme; the decision to include it was arrived at later. Now the *Military Antiquities* states incidentally that the Cheviots and the country to the north of them were likewise being surveyed in 1752, but that Roy had no hand in the work.⁴ This can hardly be a mere coincidence. Apparently what

¹ p. iv.

² *Mil. Ant.*, p. 197.

³ The illustration is reproduced from the British Museum MS., and presents some marked differences from the plate as published: see *infra*, p. 228.

⁴ Thus *Mil. Ant.*, p. 116, says that "In surveying the line of the border, in 1752, the intrenchments at Chew-green, on the head of Coquet, those at Woden Law, and likewise the tract of the Watling-street, between them, had been taken notice of in the usual way". On the other hand, in

happened was that, in dealing with Southern Scotland, the surveyors divided themselves into two parties, an eastern one and a western, the latter headed (we may suppose) by Roy. On this hypothesis other parts of our puzzle fall readily into their places.

The language which Roy uses in speaking of the Roman road between Chew Green and the Eildons¹ plainly suggests that in the east the surveying party worked from south to north. A similar arrangement would seem to have been followed in the west, for there the surveyors were unquestionably busy in Lanarkshire in the year immediately succeeding that in which the plan of the Netherby bath was drawn. The 'Plan of the Roman station called Castledykes near Carstairs', which is reproduced on plate xxvii, actually bears the date '1753'. Certain others may therefore be confidently placed in the interval between Netherby and Castledykes. These are the 'Plan and sections of Liddel Moat, a Roman post, near the junction of the rivers Liddel and Esk' (plate xxiii), the 'Plan and view of Wood castle, a Roman post near Lochmaben in Annandale' (plate viii), the 'Plans and sections of Birrenswark-hill in Annandale, with the Roman camps, &c. belonging to it' (plate xvi), and the 'Plan and section of the station at Birrens, near Middleby in Annandale' (plate xxiv). What seem to be the original sketches for the last two of these are in the King's Library; they are unsigned, but the style and technique mark them out unmistakably as Roy's.² And there are still two which not improbably belong to the same period or to the year immediately succeeding,—the 'Plan of the Roman station at Line-kirk, on the river Line in Tweeddale' (plate xxviii), and the 'Plan of Tibbers Castle, supposed to have been a Roman camp' (plate xlix). Tibbers Castle, which stood on the banks of the Nith, would naturally fall within the purview of the western surveying party. Lyne, on the other hand, lay so far to the east that it may well have been dealt with by their colleagues; and in this connexion it is not without significance that, of all the plans in the

a foot-note on p. 117 Roy expressly disclaims responsibility for the plan of Chew Green as "not having been taken by the author himself", and goes on to hint a doubt as to its accuracy. Evidently he had no great confidence in the archaeological competence of those of his colleagues who were concerned; speaking of their work on p. 116 he says frankly that "antiquities of this kind were not very particularly attended to".

¹ *Mil. Ant.*, p. 116.

² The reference numbers are xlix, 54. 2 (Birrens) and 3 (Birrenswark); see *Catalogue of the Manuscript Maps, etc., in the British Museum*, (1844) ii, p. 343. The latter agrees exactly with the plan on plate xvi of *Mil. Ant.* The former is on a slightly smaller scale than the plan on plate xxiv, and there are a few unimportant differences in the representation of the interior; otherwise the correspondence is complete. It is interesting to note that the title of the original sketch employs the spelling 'Burnswark', which is undoubtedly the correct form. The variant 'Birrenswark' seems to be a later invention of Roy's own, suggested apparently by the analogy of Birrens, and from this came the now generally used 'Birrenswark'.

Military Antiquities whose accuracy has been tested by excavation, the plan of the fort at Lyne seems to be by far the least satisfactory.¹

The summer of 1754 appears to have been spent by Watson and his assistants in completing their survey of Southern and Eastern Scotland. In the autumn they returned as usual to their head-quarters in Edinburgh, to collate their observations and transfer to paper the combined results of their field-work. At this juncture a new trend was unexpectedly given to Roy's antiquarian researches. The impulse came from one of the most remarkable Scotsmen of his generation, Lieutenant-General Robert Melville,² then a captain in the Edinburgh Regiment or King's Own Borderers, originally the Twenty-fifth Foot. In 1751 Melville had been in Edinburgh, on a recruiting mission for his regiment which was stationed in Ireland, and had visited Sir John Clerk's house at Penicuik, doubtless with an introduction from Clerk's youngest son, Matthew, who was one of his brother officers.³ The sight of Sir John's Roman collection kindled Melville's imagination, and set him wondering and thinking about "the Roman art of war by sea and land". In 1754 he was once more in Scotland, when a walking-tour undertaken from Edinburgh in company with two of Sir John Clerk's sons⁴ led him first along the line of the Roman Wall to the Clyde and next through the Highlands to Fort William, whence he crossed to Fort George and made his way southwards again by Montrose, Angus, and Perthshire. To his deep disappointment he had been unable, after leaving the Wall, to discover almost "any remains of works which could be concluded to be certainly Roman". Accordingly, after his return to Edinburgh, he betook himself to an "attentive perusal" of the *Agricola* of Tacitus, and "combining what relates to the two last campaigns with the nature of the country, and the REASON of WAR"—a phrase which he explains as "Reason applied to the art, or rather the science of war; for a French writer most justly observes, that WAR is a *trade* to the ignorant, but a *science* for the skilful"—he quickly made up his

¹ Dr. Christison says that it "is full of errors, and indeed is little better than that of Gordon, which it resembles in making the lines of fortification symmetrical on all sides and in misplacing the *Portae Principales*" (*Proc. Soc. Ant. Scot.*, vol. xxxv, p. 157). It must at the same time be admitted that the language used in *Mil. Ant.* (p. 122) seems to suggest that Roy had actually visited the spot himself at some time, whether he was the author of the plan or not.

² An interesting account of Melville's life, written by his secretary, was recently published in the *Scottish Historical Review* (vol. xiv, pp. 116-146). The episode with which we are immediately concerned is, however, only briefly mentioned there. Our information regarding it is drawn from other and even more authentic sources, to be mentioned presently.

³ Melville's visit to Edinburgh took place in the autumn. Matthew Clerk (as the manuscript Army List for 1752 in the Public Record Office shows) had received his commission as ensign in the King's Own Borderers in August 1751. He became a lieutenant four years later, and was subsequently transferred to the Engineers. He fell in the unsuccessful attack on Ticonderoga in 1758.

⁴ John Clerk of Eldin, and his younger brother, the ensign.

mind as to the route which the first Roman invaders of Scotland must have followed.

After vainly searching in Sibbald's *Historical Inquiries*, Gordon's *Itinerarium*, and "the writings of such other Scottish Antiquaries as he could meet with", for any hint of the existence of Roman camps beyond the Tay, he next made inquiry of the engineer who had just surveyed Strathmore for Watson's map. Disappointment awaited him once more. He "had the mortification to learn from him, that although he had been very desirous, according to directions received, to observe and delineate all traces whatever of intrenchments, or other military works; yet he had seen none, and indeed was positive that none did exist of a rectangular and Roman-like form". So strong, however, was Melville's conviction of the soundness of the conclusions he had reached, that he determined to put the matter to the proof of a personal investigation. He accordingly arranged to visit Lord Panmure¹ at his seat in Angus, in order that he might be able "to make enquiries and searches, especially in heaths and uncultivated places beyond it". At first the questions he put to "the many gentlemen of the county who resorted there" produced no encouraging information; he was beginning to despair of success when, just as his stay was drawing to a close, a neighbour of Lord Panmure's, who happened to be dining with him, offered a suggestion that seemed to be promising. Next day—8th August 1754—Melville set out to examine the spot indicated, Harefaulds near Forfar, "and to his great joy found, very visible, the greatest part of a *vallum* and ditch, with gates of the usual breadth of a street in a Roman camp, and each of them covered by a fit traverse or breast-work, quite observable". He was satisfied that he had now got possession of a key of the utmost value. If he followed Agricola's natural route, and made search at suitable intervals, he could hardly fail to discover other halting-places of the Roman army. As a matter of fact, in the few days still at his disposal, he lighted on three more 'temporary camps'—one at Keithick near Brechin, another at Battledykes near Finhaven, and the third at Lintrose near Cupar-Angus.

Melville's discoveries are mentioned by Roy in his 'Prefatory Introduction'.² A much fuller and more circumstantial account of them was contributed by Melville himself, in 1789, to Gough's edition of Camden's *Britannia*,³ and it is upon this, coupled with stray facts gleaned from regimental histories and the like, that the foregoing summary is based. A briefer description, contained in

¹ The friendship with Lord Panmure, like that with the Penicuik household, appears to have been originally a regimental one. Lord Panmure was colonel of the Twenty-fifth Foot when Melville was a subaltern. He had relinquished the command in 1752.

² *Mil. Ant.*, pp. v f.

³ Vol. iii, pp. 414* ff. The reference to the ed. of 1806 is vol. iv, pp. 158 ff.

a private letter of date 12th May 1788, is noteworthy chiefly for the following sentence: "Upon my return to Edin^g my first proselyte was the present Gen^l Roy, then one of the surveying Engineers, but not the one who had surveyed Angus."¹ Melville, then, was the source whence Roy's fresh inspiration was drawn. The immediate effect of his intervention can best be explained in the 'proselyte's' own words. The Roman works planned during the earlier part of the survey had been (he tells us) "of the stationary kind only"—that is, they were permanent forts or *castella*, whose remains

"being always conspicuous enough, and often exceedingly entire, could not miss to strike the eye of the most transient passenger. Not having as yet sufficiently attended to the description of the camp of a great Roman army, as given by Polybius, the author had but an imperfect notion of its figure and dimensions; neither did it occur to him that, at the distance of so many ages, the remains of works so very temporary in their nature might be found to exist; much less could he imagine, from a number of such vestiges being discovered in succession to each other, at proper distances, that the daily marches of a Roman army might thereby be traced. . . . The discovery of the camps in Strathmore having, however, been communicated to the author, he thereby found his ideas enlarged. Knowing now what a temporary Roman camp really was, he therefore (during the completion of the public business formerly alluded to,² in the following summer, 1755) employed some time in augmenting his collection, by taking exact plans of those that had been newly discovered; at the same time that a survey was made of the wall of Antoninus, and more accurate drawings of such stations as formerly had been only slightly sketched."³

This passage is important, not only as embodying Roy's confession of his new-found faith, but also as enabling us to assign to a definite date another group of his plates. To this period obviously belong his 'Plan of Agricola's camp at Battle Dykes in Strathmore, between Killymoor and Brechin' (plate xiii), and also the 'Plans of the smaller camps of Agricola in Strathmore, at Keithick, Kirkboddie, and Lintrose' (plate xiv). His 'Plan, view, and section of a British post, called the White Cather Thun, or Castrum Thuani in Strathmore' (plate xlvii) and his 'Plan and section of the Brown Cather Thun in Strathmore' (plate xlviii) almost certainly form part of the same series,⁴ although there is perhaps a bare possibility that the drawings on which these were based were not made till sixteen years later (1771), when he visited the neighbourhood again. However that may be, we are on firm ground in interpreting the allusion to "more accurate drawings of such stations as formerly had been only slightly

¹ *Proc. Soc. Ant. Scot.* vii, p. 30, where the whole letter is printed.

² This was, of course, the survey.

³ *Mil. Ant.*, pp. v f.

⁴ We are told (*Mil. Ant.*, p. 205) that they belonged to a small number of plans or sketches of "very curious British posts" made while he was "searching for, or observing" Roman camps; and they lie only 4 or 5 miles NE. of Keithick.

sketched". The reference is to the 'Plan of the Roman station Lindum, at Ardoch in Strath Allan; together with the adjoining camps of Agricola' (plate x); the 'Plan of the Roman Camp at Dealgin Ross in Strathern. . . . Shewing also the situation of Victoria, founded by that general after his battle with Galgacus' (plate xi); the 'Plan shewing the situation of Inchstuthill, formerly an island in the Tay, with the old intrenchments remaining upon it' (plate xviii); the 'Plan and sections of the Roman station Lindum, at Ardoch in Strath Allan' (plate xxx); the 'Plans and sections of some posts near Ardoch' (plate xxxi); and the 'Plan and sections of the Roman station Hierna, near Strageth, on the river Ern' (plate xxxii). In the case of Inchtuthil the published plate is actually dated '1755'. And for the others we have the evidence of the original drawings, which are still preserved in the British Museum;¹ three of them are signed in autograph 'Will. Roy', and are dated either '1755' or 'July, 1755'. The whole of the sites in Perthshire, as well as in Angus, are thus accounted for, except Grassy Walls and 'Bertha' (plate xii), of which we shall hear by and by, and 'the Roman post at Fortingaul, in Glen Lyon' (plate xix), the plan of which must be from another hand, since Roy expressly tells us that "no opportunity hath offered of examining personally its vestiges".² It should be noted that, when at Ardoch, he was able to take advantage of what he had learned from Melville in the preceding summer, and to identify the temporary camps, whose remains had been misunderstood by earlier observers, such as Gordon.

Despite the novelty attaching to this last discovery, it cannot be regarded as the most important incident of the summer of 1755. That distinction rather belongs to the systematic survey of the great barrier that once ran athwart Central Scotland, the chief fruit of which was the 'Plan shewing the course of the Roman wall called Grime's Dyke, raised along the isthmus between the Forth and the Clyde, . . . together with plans of those stations belonging to the wall, whose vestiges do yet exist' (plate xxxv). This is an extremely valuable record, preserving the track of the Wall, so far as it was visible a hundred and sixty years ago, as well as the outlines of no fewer than ten supporting forts. Among the by-products of the same survey were the 'Plan shewing the situation of the Roman station Camelon, with regard to the wall of Antoninus' (plate xxix), and the 'View of Duntocher bridge on Grime's Dyke', which appears as No. xxxvii in the 'List of Plates'. As we shall learn in due course, this particular view was never published.³ It is still in existence,

¹ They are in the King's Library, the reference numbers being l. 79, 2a, 2b and 3, and l. 83, 3 (*Catalogue of the Manuscript Maps, etc., in the British Museum*, ii, pp. 359 f.). They do not show Latin names like Lindum and Hierna. These are derived from Roy's subsequent study, especially of the *De Situ Britanniae*.

² *Mil. Ant.*, pp. 134 f.

³ See *infra*, p. 213.

XXVII.

View of DUNTOCHER BRIDGE on GARNIE'S DYKE. 1733.



ROY'S SKETCH OF DUNTOCHER BRIDGE

From the British Museum MS.

Published by the Society of Antiquaries of London, 1917

however, and bears date '1755' (pl. XXVIII). There is no reasonable doubt as to its being from Roy's own brush, and it is certain that it was upon his initiative and under his personal supervision that the survey of the Wall was made. The general description he gives shows how thoroughly the work was done:¹

"In carrying on the general survey of Scotland begun in 1747, the wall of Antoninus was observed in the ordinary way, and accordingly inserted in the plan of the isthmus; but this, as well as every district of the country, being the allotment of work for several different people, without the wall itself becoming the principal object of the whole, or of any one of them; it was therefore judged proper, in 1755, to survey accurately the line of this old intrenchment by running a suite of stations along its whole course."²

At this time, so far as can be judged from the expressions which he uses, Roy's ambition in regard to Roman antiquities extended no farther than the formation of a collection of sketches.³ The idea of writing a book had certainly not entered his mind.⁴ The visit to Strathmore, the fresh examination of the Perthshire sites, and the thorough survey of the Wall had all been undertaken in the interests of the great map. Early in 1755, as we learn from other sources, Watson had been recalled to England, to advise as to certain measures that were being contemplated in view of a possible French invasion. Roy, who had been his right-hand man from the outset, was left in chief charge in Scotland. Hence, we may conclude, the distinctly archaeological bent which the operations of the year assumed. As his experience grew, Roy's ideal of what the map ought to be had developed considerably, and the inadequacy of the record of the military antiquities seems to have been the first of its many 'imperfections' which he set himself to remedy. Fate decreed that it should also be the last. Britain and France were already at grips on the North American continent. The very month which Roy devoted to the re-drawing of the Perthshire plans witnessed the disastrous defeat of Braddock at Fort Duquesne. At any moment the flame might spread to Europe. Before the close of the year the danger had become so menacing that the unfinished map had to be hastily rolled up. It seems to have passed into Roy's custody, and to have remained in his possession till his death; we shall find him disposing of it in his will.⁵

¹ *Mil. Ant.*, p. 155.

² It is perhaps worth noting that Roy's survey, unlike those of Gordon and Horsley, was made from east to west (*Mil. Ant.*, p. 157). This was, as it happens, the direction in which its original designer had worked (*Roman Wall in Scotland*, pp. 308 f.).

³ See, for instance, the last sentence of the passage quoted on p. 171 *supra*.

⁴ Cf. *Mil. Ant.*, pp. vii ff.

⁵ See *infra*, p. 208. According to Gough, *British Topography*, ii, p. 586, it was in the Ordnance Office in 1780. But there is no reason to believe that this statement is any more accurate than the rest of the paragraph in which it occurs: see *supra*, p. 163 foot-note ³, and *infra*, p. 203.

We are now at the close of the first of the chapters of Roy's life with which we have any direct concern. But, before we take leave of it, there is a biographical question of considerable interest to be settled. In what capacity was he rendering service during the survey of Scotland? The *Gentleman's Magazine*, it will be remembered, asserts that he was a colonel of artillery as early as 1746, while Chalmers suggests that he was given the rank of practitioner-engineer, the lowest step in the ladder, in 1748. Odd as it may appear, a study of the evidence forces us to the conclusion that from first to last he was a civilian, and that he did not don military uniform till the very end of 1755. The only alternative is to suppose that he was a private soldier or a non-commissioned officer, an hypothesis which is quite untenable in the light of the position of authority which he occupied, to say nothing of the fact that he associated on equal terms with commissioned officers like Melville. Chalmers may, therefore, be right in saying that he was originally in the employment of the post office at Edinburgh. Watson was closely connected with Edinburgh, his father being Thomas Watson of Muirhouse; in 1747 he planned a new magazine for the Castle. He may well have made Roy's acquaintance there, and subsequently picked him out as having special qualifications for the post to which he appointed him.¹ Whatever may be the truth as to this, none of Roy's biographers have set forth quite correctly the documentary evidence as to his first connexion with the army. It may, therefore, be permissible to summarize it here.

What professed to be a complete record of "the military progress of the future General" was printed in the *Proceedings of the Society of Antiquaries of Scotland* for 1872,² the source being the Army Lists, publication of which began in 1754. The statement is full and accurate, so far as it goes. But it has one defect: it starts too late. It opens with the assertion that "the first time that the name of William Roy appears in the Army List is in March 1757". This is true, if search be restricted to the corps of Engineers. Roy is first mentioned as a member of that corps in the fourth of the published volumes, which comes down to March 1757. He figures there as a practitioner-engineer at 3s. a day, a grade which nominally ranked with that of an ensign of foot, although the latter received 3s. 8d. a day together with 3s. a day for subsistence; it may be added that the daily pay of a lieutenant was 4s. 8d. together with 3s. 6d. of subsistence money. This last point is by no means irrelevant, for on an earlier

¹ Roy himself, in the passage quoted *supra*, p. 165, says that he acted as "assistant Quarter-Master". Porter in his *History of the Corps of the Royal Engineers*, ii, p. 229, goes a step farther and makes him "Assistant Quarter-Master-General". So, too, Portlock in his *Memoir of the Life of Major-General Colby* (1869), p. 16, where he is spoken of as "General Roy, R.A.", an echo of the blunder which we have traced back to Gough.

² Vol. ix, pp. 563 f.

page of the same volume Roy's name is included among those of the lieutenants of the Fifty-first Foot (Major-General Napier's), the date of his commission being given as 4th January 1756. Nor is even this his earliest appearance in the official lists. The immediately preceding volume—the third of the published series—comes down to May 1756, and there too (as we should expect from the date of his commission) he is to be found as one of Napier's lieutenants. The number of the regiment, however, is no longer the same; it is the Fifty-third Foot, not the Fifty-first. A re-numbering must obviously have taken place between May 1756 and March 1757.

For our next hint we must turn to the files of the *London Gazette*. There (No. 9,548), under date 24th January 1756,¹ we have a list of the lieutenants and ensigns appointed to a new regiment of foot "to be forthwith raised" at Exeter by Colonel Napier, and the last lieutenant to be mentioned is "Engineer William Roy". Roy, therefore, must have been posted to the corps before he obtained his commission as a lieutenant in the line. That being so, his name should have appeared among the Engineers in the third of the printed Army Lists (August 1755–May 1756). The omission is clearly accidental, and it is perhaps not surprising in the circumstances. This was the first occasion on which the Engineers were included in the Army List at all, and their inclusion was obviously decided on hurriedly, since they have no place upon the title-page. We need not wonder that the roll should be incomplete. In any event the inference drawn from the entry in the *Gazette* is fully confirmed by the official 'Record' of the corps, for information regarding which I am indebted to Capt. Blyth, R.E., Acting Secretary of the Royal Engineers' Institute at Chatham. The 'Record' shows that Roy was appointed a practitioner of engineers on 23rd December 1755, and that (as we already know) he received a commission as lieutenant in the 'Fifty-third' Foot on 4th January 1756.²

¹ I owe this reference to Mr. John A. Inglis of Auchendinny.

² Col. Vetch in the *Dict. Nat. Biogr.* (xlix, p. 372) says: "On 23 Dec. 1755 Roy, who had already received a commission in the 4th King's Own Foot, was made a practitioner-engineer." So far as this statement agrees with what has been said above, it is doubtless drawn from the 'Record' of the Royal Engineers, which Col. Vetch cites as one of his sources. The alleged connexion with the Fourth Foot is harder to explain. That the allegation had no foundation in fact seems certain. The manuscript Army List for 1752, which was kept up to date for some years afterwards, and which is now in the Record Office, includes two battalions of the Fourth King's Foot, but Roy's name does not occur in either list of officers. It may perhaps be conjectured that Col. Vetch found the shortness of the interval between Roy's appointment as a practitioner and his commission as a lieutenant inexplicable except on the theory that he had previously been an ensign. In those days the seconding of officers from line-regiments was a recognized means of securing an adequate supply of practitioner-engineers; but, if that had happened in Roy's case, he would undoubtedly have been gazetted to Napier's regiment as 'Ensign William Roy', not as 'Engineer'. If this hypothesis as to the origin of the mistake be accepted, it is easy to imagine a confusion between the number of the regiment and the date of the commission.

What really happened is now fairly obvious. The autumn of 1755, and the months that immediately succeeded it, witnessed a national movement which—*magnis componere parva*—was not altogether unlike the tremendous ordeal through which our own generation so recently passed. The army was found to be too small for the task that awaited it; fresh regiments were called into existence; men originally destined for civilian callings ranged themselves under the colours. Roy, though not himself a soldier, had been for so long a man under authority, having under him soldiers, that his immediate response to the appeal was a matter of course. And it was equally a matter of course that he should attach himself to the corps where his special abilities were most likely to prove useful. But he was now twenty-nine years of age, with a valuable experience behind him. It would have been unreasonable to make him start from the same point as the ordinary subaltern not yet out of his teens. His appointment as a practitioner-engineer gave him the same rank as an ensign, thus opening the way for a lieutenancy, and after an interval of less than a fortnight his lieutenant's commission followed. The lieutenancy was, as we have seen, a lieutenancy in the army; he did not become a lieutenant of engineers till 1759. And to the end his army rank was always in advance of his rank as an engineer. When he was made a major-general in the army in 1781, he remained a captain of engineers, not obtaining the full colonelcy of the corps until nearly four years later.

Roy's career as a soldier lies outside the scope of our inquiry. But it may be noted that, after being stationed for some time at Chatham, his regiment took part in Sir John Mordaunt's ill-starred expedition to Rochefort, and that he was one of the witnesses at the subsequent court martial. His later continental experience was happier. He speedily proved his capacity, and before the close of the Seven Years' War he had been appointed Deputy Quarter-Master-General in Germany. In spite of his preoccupation with his more distinctively military duties, his interest in his original work evidently remained unimpaired. As soon as the war was over, he was not only ready, but eager, to take up the broken thread. Indeed, reflection had apparently enlarged his ideas considerably. We may take it for granted that he was himself responsible for the plan adumbrated in the following extract from the scientific paper already quoted. After speaking of the 'imperfections' that marred the usefulness of the unfinished map of Scotland, he proceeds:

"On the conclusion of the peace of 1763, it came for the first time under the consideration of Government, to make a general survey of the whole island at the public cost. Towards the execution of this work, whereof the direction was to have been committed to my charge, the map of Scotland was to have been made subservient, by extending the great triangles quite to the northern extremity of the island, and filling them in from the original map. Thus that imperfect map would have

been effectually completed, and the nation would have reaped the benefit of what had been already done, at a very moderate extra-expence."¹

For twelve years Roy continued to hope that his great scheme of a Government survey, conducted on scientific principles, might at any moment go forward. In July 1765 he was appointed "to inspect, survey, and make Reports from time to time of the state of the Coasts and Districts of the Country adjacent to the Coasts of this Kingdom and the Islands thereunto belonging".² Apart, however, from a tour of inspection in Ireland, his report on which is still extant in manuscript,³ little or nothing practical seems to have resulted. The miscellaneous duties that occupied the period of waiting must have left him a tolerable amount of leisure, for it was now that his most serious work in Roman studies was done and the *Military Antiquities* written. More precisely, it was between the autumn of 1764 and the summer of 1773 that his archaeological activity attained its maximum. The earlier limit he fixes for us himself in his 'Prefatory Introduction', where he tells us 'that by 1764 "the observance of the actual manœuvres of modern armies" had so effectually interfered with his search after Roman camps that "the inquiry into this branch of antiquity . . . was now in a great degree forgotten, and probably would never have been more thought of, had it not been for the accidental discovery of a camp in the south-west of Scotland"'. The camp, he goes on to say, was at Cleghorn in Clydesdale, and the discovery took place in autumn. In point of fact, his 'Plan of the camp of Agricola at Cleghorn in Clydesdale' (plate ix) is dated 'Sept. 7th. 1764'.

No indication is given as to who the discoverer was, but there is no real room for doubting that it was Roy. We may take it as certain that the incident occurred when he was spending a short furlough with his relatives. His father had died in the end of 1748, and the family would then appear to have removed to Lanark, where the widow survived until 1777.⁴ The site of Cleghorn camp

¹ *Philosophical Transactions*, lxxv, p. 387.

² The words are those of a Royal Warrant (*War Office Records*, Class 55, No. 365, p. 14), dated 31st July 1765, and addressed to the Master of the Ordnance, giving directions for the payment to Roy of an allowance of twenty shillings per day in respect of these duties. Mr. S. C. Ratcliff, of the Public Record Office, who has kindly made search for me, writes that the payment continued to be made quarterly until 31st March 1790 (*W. O.*, 52/37, p. 178), that is, until the last quarter-day before Roy's death. This allowance does not seem to have covered the special missions which he more than once discharged abroad. Thus, *W. O.* 55/365, pp. 118 f. shows that he received £3 a day for 119 days (26th Oct. 1765–21st Feb. 1766) on extraordinary service at Dunkirk.

³ It is dated 1766. See *Notes and Queries*, 2nd Series, vii, p. 358. Soon afterwards he was despatched to Gibraltar to report upon the defences.

⁴ *Mil. Ant.*, p. vii.

⁵ The parish register of Carluke has the entry 'Mortcloth to John Roy' against the date 25th December 1748, and the corresponding entry 'Best Mortcloth to Mrs. Roy in Lanark' against

would thus be within a mile or two of his mother's house. The language used rather suggests that he had stumbled upon it in the course of a stroll, although it is also possible that it was brought to his notice by some resident who had heard from his friends of his interest in such things. Whatever may have been the circumstances attending the "accidental discovery", its effect was immediate. The old enthusiasm was rekindled. A careful survey was carried out with the aid of proper instruments, as is clear from the fact that the drawing is entitled a 'plan' and not a 'sketch'. This distinction was one in regard to which Roy was most punctilious. As we shall have to refer to it more than once in the sequel, it will be well to quote his own description of the underlying principle:

"It seems necessary to observe, that though a considerable part of these plans were made from accurate measurement, yet this was not always the case; it being impossible, now and then on a journey, to find time, or constantly to be provided with the necessary instruments for taking exact plans. Some of them were therefore done by common pacing only; and as the same sort of fidelity seems necessary in plan-drawing as in history, in order not to mislead, therefore such as were taken after this slighter method are called *sketches*, to distinguish them from those that were measured with precision, though it is hoped that even the slightest kind will be found not to depart essentially from the truth."¹

There was a special reason why the unexpected emergence of a 'temporary' camp at Cleghorn should give Roy food for thought. In his earlier speculations, which were admittedly based on those of Melville, he had been inclined to hold that there was no evidence for the ordinary view that Agricola had advanced into Caledonia by the western route.² The indications, he believed, pointed rather to the east. So far as the Scottish side of the border was concerned, this theory found its main support in the existence at Channelkirk, in Berwickshire, of the remains of a camp which had been identified as Agricolan. It is interesting to learn from Roy³ that the actual discoverer was Melville. Melville himself is silent upon the subject, both in his contribution to Gough's *Camden* and in the private letter which has been referred to above.⁴ But Roy, though he gives no details, says just enough to enable us to fix the date with some approach to accuracy. He tells us that the discovery was made "some time after" the original expedition to Strathmore, and adds that Melville was "soon after called to more important

the date 6th July 1777. There can hardly be a doubt that the latter refers to Roy's mother, who would naturally be buried beside her husband. If so, it shows that the widow was settled in Lanark at the time of her death. And the probabilities are all in favour of the removal having taken place early in 1749. John Roy's will, which was executed a week or two before his death, and a copy of which is in the General Register House at Edinburgh, discloses a degree of financial embarrassment that must have rendered the breaking up of the old home inevitable.

¹ *Mil. Ant.*, p. xi.

² *Ibid.*, p. vi.

³ *Ibid.*, pp. vii f.

⁴ See *supra*, p. 171.

employments, which necessarily occasioned his being long absent from Britain". The visit to Lord Panmure took place in the summer of 1754, and in the spring of 1756 Melville sailed for the West Indies, where he remained for many years, except for brief visits to Europe in 1762 and again in 1769. It is, therefore, reasonable to suppose that Channelkirk was discovered in 1755. In the summer of that year the Twenty-fifth Regiment was moved from Ireland to Glasgow, when Melville was specially detailed for recruiting service.¹ His quest for 'King's Own Borderers' would naturally lead him into Berwickshire. The road then in use between Edinburgh and Lauder traversed the site of the camp diagonally,² so that the remains could hardly fail to catch the eye of an observant traveller. Many such must have noticed them before. Melville was the first to interpret them as Roman. We may be sure that the fact of the discovery was communicated to his 'proselyte' at the earliest opportunity. Whether Roy was able to visit the spot at the time is much more doubtful. The point is one to which we shall have to return later. What concerns us meanwhile is the effect produced upon his mind by the finding of Cleghorn.

That event did more than reawaken a slumbering interest. It suggested fresh possibilities as to the line of Agricola's advance, and so presented a new problem for solution. The challenge thus thrown out was accepted in a characteristically scientific spirit; before an explanation could be formulated a search for further evidence must be made. Roy's duties in London precluded a personal investigation. Accordingly, as he informs us in a foot-note,³ he communicated with "Mr. Commissioner Clerk", and requested him to "examine Annandale" for traces of temporary camps. "Mr. Commissioner Clerk" was undoubtedly George Clerk or Clerk-Maxwell, the second son of Sir John Clerk of Penicuik, and the grandfather of Clerk-Maxwell, the physicist. He had been appointed a Commissioner of Customs in 1763, and he was intimately associated with the district to be explored. He had inherited the property of Drumcrieff in Annandale from his father, while he became possessed of the estate of Middleby through his marriage with Miss Maxwell, the heiress, who was his cousin and whose name he assumed. On the death of his eldest brother, in 1783, he succeeded to the baronetcy. Melville's intimacy with the Penicuik household will not have been forgotten. It is more than probable that it was he who introduced his 'proselyte' to what would be a singularly congenial circle. Sir John himself, generally spoken of by his contemporaries as 'Baron Clerk', a title derived from his office of Baron of the Exchequer, was, of course, an indefatigable collector of Roman antiquities, and an enthusiast in everything that related to the Roman occupation of Scotland. In all likelihood it was under his influence

¹ *Scottish Historical Review*, xiv (1917), p. 121.

² *Mil. Ant.*, p. viii.

³ See *Mil. Ant.*, plate vi.

that Roy brought the Roman road from Channelkirk and Soutra across country by Mavisbank to Cramond, instead of taking it (as he ought certainly to have done) by Dalkeith to Inveresk, and thence within easy reach of the sea to the same destination.¹ If this suggestion be accepted, it follows that the theory must have been adopted not later than 1755, the year of the Baron's death.

Returning to 1764, we find that Clerk-Maxwell's search of Annandale was successful. He discovered what he believed to be one temporary camp near Lockerbie, and the vestiges of another at Tassies-Holm, near Moffat. Even when the latter had been set aside as too fragmentary to be conclusive, the former, taken along with Cleghorn, seemed to Roy "to put it beyond a doubt, that one division, at least, of Agricola's army, or of some other that used a form of castrametation agreeing perfectly with his, had marched by this road"²—that is, by the road from Carlisle to the western end of the isthmus. By the time he received Clerk-Maxwell's report—indeed, very possibly before he communicated with him at all—Roy was once more in London, and during the next five years his archaeological studies must have been on purely theoretical lines. We may presume that, while the particular case of Scotland was never far from his thoughts, his main attention was given to the ancient authorities, notably Polybius, Tacitus, and Ptolemy. The spurious *De Situ Britanniae*, too, which had been published in 1757, was now available to mislead him. Fortunately, his sense of the importance of accurate drawings remained unimpaired. Plate vii presents us with a 'Sketch of Agricola's camp on Torwood-moor, near Lockerby in Annandale', while plate viii includes a 'Sketch shewing the situation of some old intrenchments near Tassies-holm, in the head of Annandale, supposed to be the vestiges of one of Agricola's camps'. It will be noted that in both cases the drawings are described as 'sketches', not as 'plans', a clear indication that the observations on which they are based were made 'on a journey', when the necessary instruments for accurate measurement were not at hand, and recourse had to be had to pacing. Plate vii is dated '1769', and the sketch of the entrenchments at Tassies-Holm undoubtedly belongs to the same year. This year, in fact, deserves to be marked with a red letter in the story of Roy's researches. By combining stray pieces of evidence, we can follow his footsteps pretty closely.

¹ See *Mil. Ant.*, p. 103, for Roy's view as to the line of the Roman road. That Sir John Clerk was ultimately responsible for the theory may be inferred from a passage in Sir John Sinclair's *Statistical Account of Scotland* (vol. x, p. 287), where the writer, after describing certain antiquities found at or near Mavisbank, proceeds: "These circumstances led Sir John Clerk, who was well acquainted with the antiquities of this country, to suppose that this must have been a Roman station. And, accordingly, the late General Roy has pointed it out in his maps as the place where the Romans passed the North Esk, in their way from the South to Cramond."

² *Mil. Ant.*, p. viii.

His mother was still alive and resident in Lanark. We may suppose that his primary object was to visit her after a five years' interval. It is, however, certain that he was also bent on verifying some of the theories that had been taking shape in his mind. Entering Scotland by the western route from Carlisle, he lingered long enough in Annandale to examine, probably in company with Clerk-Maxwell, the camps of Torwood Moor and Tassies-Holm, and to make his sketches. As he continued his journey northwards through the valley of the Clyde, he kept a keen look-out for any signs of an entrenchment that he could associate with Agricola. This we may confidently infer from the passage in which, after giving a brief account of Tassies-Holm, he goes on to say:

"Advancing from this place, along the Roman Way, into Clydesdale, search hath been made in the neighbourhood of Elwin Foot, and Crawford castle, for another camp, at the usual distance of a day's march, but hitherto without success."¹

Despite the impersonal mould in which this sentence is cast, it is not open to question that Roy himself was the searcher. And the same is true of the immediate sequel:

"Neither have any vestiges, as yet, been discovered near Culter or Biggar, near which places it is likely the next must have been."²

Lanark would be quite a convenient centre for exploring the neighbourhood of Culter and Biggar, and Roy may have devoted to this task some portion of the time which he spent with his relatives. Alternatively, the investigation may have been an incident of his return journey to London, for one of the few explicit statements he makes about the tour of 1769 is that in travelling south he passed through the Melrose district.³

The shortest way from Lanark to Melrose lay down the valley of the Tweed by Peebles and Galashiels, and the choice of it would have the added advantage of bringing him close to the site of the Roman fort at Lyne, which (as we have seen) it is quite possible that he had never examined. On the other hand, Lyne was a permanent station, while at the moment Roy's whole interest was absorbed by the problem of the temporary camps. For this reason it seems *a priori* more probable that he crossed to Edinburgh, where he would find old acquaintances to welcome him, and then proceeded southwards along what he believed to be the eastern line of Agricola's advance. To this period I am disposed to attribute plate vi, which is a 'Sketch of Agricola's camp near Channel Kirk'. Channelkirk, it will be remembered, had been discovered by Melville, in all likelihood in 1755. Roy, however, does not seem to have heard of it until it was too late to include it among the sites which he surveyed in the summer

¹ *Mil. Ant.*, p. 61.

² *Ibid.*, l. c.

³ *Ibid.*, p. 115.

of that year. Had it been otherwise, we should certainly have had a 'plan', and not merely a 'sketch'. He has told us himself that the use of the term 'sketch' implies that the drawing was made 'on a journey', and the tour of 1769 fits in with the general story much better than does any other of which we know. Moreover, the hypothesis can be supported by evidence drawn from the plate itself. The 'Old Road to Edinburgh', along which we pictured Melville as riding in 1755, is shown winding in leisurely fashion diagonally across the camp. But at some distance to the east there appears also a small section of the 'Turnpike Road to Edinburgh', with a 'New Inn' on the banks of the stream hard by. Now in 1759 an Act of Parliament¹ had been passed authorizing the improvement of the road from Edinburgh over Soutra, by Lauder, Greenlaw, and Coldstream, into England. This is undoubtedly the 'Turnpike Road' which figures in Roy's 'sketch' of Channelkirk. Chalmers, who mentions that it was the first road in Berwickshire to be "placed under the useful regimen of turnpike laws", adds in a foot-note that "it was begun on the 7th July 1763, it was opened for carriages on the 28th of October 1766, and it was finished in the subsequent December".² It is hardly necessary to point out how well this harmonizes with the suggestion that Roy's visit took place in 1769.

We may be sure that, as he approached Melrose, a Roman day's-march south of Channelkirk, he hunted eagerly for any clue to the whereabouts of the temporary camp which he believed that Agricola must have constructed in the neighbourhood. But the ramparts of the great enclosure that once dominated the confluence of the Leader and the Tweed had been too thoroughly demolished for any trace of them to be discernible. Nearly a century and a half had to elapse before the spade revealed the exact spot on which the Roman soldiers had pitched their leathern tents.³ The fruit which the visit bore was of a different, and wholly unexpected, kind. When he reached St. Boswells, he seems to have quitted the line of the Roman road and to have turned westwards, heading for Carlisle by way of Hawick.⁴ As he journeyed towards the

¹ 33 George II. c. 56. There is no copy of this Act in any of the Edinburgh legal libraries, and the title in the printed list does not make it immediately obvious that it is the road past Channelkirk that is intended. Mr. S. C. Ratcliff, of the Public Record Office, has, however, been good enough to send me a transcript of the preamble from the Parliament Roll (33 George II, part 10, m. 1) which puts the matter beyond doubt. It runs: "Whereas the high road leading from Deanburn bridge to the confines of the County of Midlothian through Soutrahill by Channelkirk Greenlaw and Antonhill to the side of the Tweed opposite to Coldstream and from thence to the west end of the village of Cornhill in the County Palatine of Durham is during the winter season or wet weather almost impassable &c. &c."

² *Caledonia*, vol. ii (iii), p. 313, and foot-note (c).

³ See Curle, *A Roman Frontier Post*, pp. 15 ff.

⁴ Otherwise he could not possibly have missed "the old course of the way" of whose existence

Border, his mind busy with the problems of the Roman invasion, he was deeply impressed by the view of the three peaks of the Eildons, and it suddenly struck him that they must indicate the position of the Trimontium of Ptolemy, hitherto placed by general consent in the south-west of Scotland, somewhere in the neighbourhood of the Solway. His own words are:

"In returning from the north, in 1769, through this part of the country, it first occurred, that if such hills as these, with any vestiges of intrenchments near them, or even a Roman way pointing towards them, had been situated in Annandale, or any where near Solway frith, their remarkable aspect would have suited well with the etymology of the Roman Trimontium."¹

To any one familiar with the locality it is plain that it must have been as he looked back upon the Eildons from the south that the idea came to him, for it is from that side that their domination of the landscape is so remarkable. It was, therefore, too late for him to make further search for signs of a Roman settlement at or near the foot of their slopes.

From Carlisle he travelled to York, making drawings, as he passed, of two camps whose outlines appeared to him to have some affinity to that of Birrenswark, which he may have revisited when sojourning with Clerk-Maxwell in Annandale, and which he considered to have been "thrown up at some other period of time, and by some other Roman general than Agricola".² We have the result in the 'Sketches of the camps at Kreiginthorp-common, near Kirkby Thure, and Reycross on Stanmoor', which together occupy plate xvii. The diligence with which material was collected during the tour of 1769 suggests unmistakably that the possibility of publication had by this time assumed a more or less definite shape. Originally, as he explains in his 'Prefatory Introduction',³ he had contemplated nothing more than two short essays, one on the ancient system of castrametation of the Romans, and the other on the march of Agricola into Caledonia. The project, however, grew more ambitious as he proceeded, and the zeal with which he followed up the scent of Trimontium appears to indicate that he had already resolved on a serious attempt "to rectify the ancient geography of these parts".⁴ Reflection served to strengthen his conviction as to the soundness of his conjecture regarding this particular site, especially when he learned "on inquiry afterwards made"⁵ that the Roman road could be traced

he only learned "on inquiry afterwards made" (*Mil. Ant.*, p. 116); and he would certainly have taken occasion to carry out the "more accurate observation" of Chew Green, which he felt to be desirable (*Mil. Ant.*, p. 117, foot-note).

¹ *Mil. Ant.*, p. 115.

² *Ibid.*, p. 73.

³ p. ix.

⁴ He tells us (*Mil. Ant.*, p. 91) that the idea of making such an attempt was first suggested to him by a remark made by Stukeley in his Commentary on the *De Situ Britanniae*.

⁵ *Mil. Ant.*, p. 116.

for nearly twenty miles north of the Cheviots, pointing steadily towards the Eildons. He seems to have had friends in or near Melrose on whose powers of observation he could rely, for, after noting the success of his inquiry as to the road and its course, he continues :

"Accordingly, directions were given to examine the neighbourhood of the Eildons, in order to see whether any vestiges of a station could be discerned near them ; and, in consequence of this search, some imperfect traces of an intrenchment were perceived at the village of Eildon, situated under the eastern skirt of the hills."

These vestiges were made the subject of a personal inspection two years later ; "but, it must be owned, were found by much too slight to decide absolutely the point in question".¹ The decision had to wait for the advent of the North British Railway and Mr. James Curle. Our information as to the tour of 1771 is meagre in the extreme. We have just learned that Melrose was included in the itinerary, but there is nothing to show whether Roy took it on his northward or on his southward journey. It may be assumed as a matter of course that a visit was paid to his aged mother at Lanark. The only other locality as to which there is no doubt is Perthshire. His various theories must now have been more or less completely developed, and the plan of his book mapped out. Possibly some of it had actually been written. He may have taken advantage of the present opportunity to renew or confirm his impression of camps or forts with which he was already familiar. But the object of his expedition to Central Perthshire was as definite as that of his mission to the Eildons, and it was much more successfully achieved. It will be simplest to let him tell his own story :

"From this suite of camps now discovered, such a number of points were ascertained as sufficiently indicated the general route or routes by which the Roman army advanced from the northern counties of England, as far as Strathmore in Scotland. But as in penetrating from Strathern into this last mentioned part of the country, they were under the necessity of crossing the great river Tay, it naturally occurred, that at the passage of this remarkable river, either on its western or eastern bank, the army would probably encamp ; and that the vestiges of their intrenchments might possibly be found to exist. Accordingly, proper search being made, in 1771, the remains of this camp were discovered on the east bank of the Tay, at a place called Grassy-walls, about three miles north from Perth. Even the partial existence of this work gave great pleasure, and was considered as exceedingly fortunate."²

From the title of plate xii, which runs 'Plan shewing the vestiges of Agricola's camp at Grassy Walls, on the east bank of the Tay ; as also the situation of

¹ *Mil. Ant.*, p. 116.

² *Ibid.*, p. viii.

Bertha, supposed to have been the Orrea of the Romans', it is plain that on this occasion Roy had come provided with a proper outfit of surveying instruments. The British Museum manuscript enables us to add a touch of detail hitherto unpublished. The camp was discovered and the plan made on 21st August 1771.¹ The identification of the neighbouring site of Orrea bears silent testimony to the influence of the *De Situ Britanniae*. Though the name is a Ptolemaic one, the position has obviously been determined by the help of the sequence of stations in 'Richard's' Itinerary. Bertha, believed (with or without reason) to be the original site of the city of Perth, stood at the point where the Almond now flows into the Tay. Maitland, writing in 1757, had stated that the remains of a Roman camp were to be seen there.² But there is no evidence that Roy or his comrades of the original survey had observed anything of the kind in 1755 or the years that preceded. During the latter part of the century, however, encroachments made at intervals by the Almond exposed in the freshly-cut bank the interior of great rubbish-pits, which seem to have exactly resembled those that have since been found at Newstead and elsewhere. Local antiquaries immediately and, as we now know, correctly associated them with the Roman invasion, thus establishing the claim of Bertha to be regarded as a Roman station. The first of these accidental revelations took place about 1759, four years after Roy had been in the basin of the Tay on his earliest archaeological crusade, and it was followed by a second about 1761.³ When he came again on a similar quest in 1771 he would naturally hear of what had happened since his previous visit, and would make a point of securing for his collection a record of the little that was left of the defences of Bertha, or Orrea, as he prefers to call it. It is quite possible that its situation may have been the clue that led to the discovery of Grassy Walls.

The harvest of drawings which the tour of 1771 yielded was uncommonly scanty. Apart from that which has just been discussed, there is only one about which we can be certain—the 'View of the Eildon Hills as they appear from the South East, the Quarter from which the Romans would first discover and approach them' (plate xxi). But there are interesting possibilities in another direction. His journey from Lanark to Perth, or from Perth to Lanark, would lead him through Glasgow. What more likely than that he should have stopped there⁴ to see the remarkable group of altars and other objects which had come to light in the preceding May on the Antonine Wall, and had been presented

¹ See *infra*, p. 224.

² *Hist. of Scotland*, vol. i, p. 198.

³ Cant's ed. of Adamson's *Muses' Threnodie* (1774), p. 25. A third series of pits was exposed in April 1774 (*Ibid.*, p. xxi).

⁴ It may have been then that he made inquiry as to whether there were any traces of the supposed "Roman way leading from Glasgow to Paisley" (*Mil. Ant.*, p. 106).

to the University of Glasgow by the proprietors of the Canal? These are the 'Antiquities discovered at the station of Achindavy on Grime's Dyke, in May, 1771', which are grouped together on plate xxxviii. The general style of representation, the careful attention to scale, and the absence of any indication of indebtedness to any one else, all go to suggest that Roy was himself the artist. If so, the original sketches must have been made now. It is true that Roy never pretended to be an epigraphist, and that there was no room for objects of the kind in his book as he had planned it. Nevertheless, there was a perfectly intelligible motive for his securing drawings when the occasion offered. These were the only inscriptions then in the University of which copies were not otherwise available. Illustrations of all the rest had appeared a year or two before in the first edition of the *Monumenta Imperii Romani, in Scotia, maxime vero inter vestigia valli, auspiciis Antonini Pii imperatoris, a Fortha usque ad Glottam perducti, reperta, et in Academia Glasguensi adservata, iconibus expressa*, which was published about 1767.¹ It is perhaps significant that we shall presently find Roy in correspondence with the probable editor of the *Monumenta*, Professor John Anderson. He may have made, or renewed, acquaintance with him in 1771.

If we are right in concluding that Roy was the author of the original sketches for plate xxxviii, a further inference suggests itself. Plate xxxix is entitled 'Antiquities discovered at the station of Castle-Cary on Grime's Dyke—1769', and shows, besides a 'Plan of a Roman House with a Warm Bath belonging to it in the South East Angle of the Station', two inscribed stones, the first 'expressing some proportion of the Wall to have been raised by the first Tungrian Cohort', and the second being 'an Alter found in one of the Apartments of the House'. As Roy tells us in his text that the bath-house was exposed and the altar to Fortune discovered in 1769,² it might at first sight seem as if the date in the title were intended (like the 'in May, 1771' of plate xxxviii) to indicate the date of discovery. But, if this were so, it would be inaccurate, as Roy would have known. The Tungrian slab was brought to the surface in 1764,³ and became the property of Sir Laurence Dundas, the owner of Castlecary. The altar to Fortune, along with some less important objects from the bath-house, were added to the collection in 1769, and remained there until the whole was made over to the University of Glasgow in 1774.⁴ Is it not, then, probable that '1769' is really a record of the year in which the original drawings were executed, particularly as this is the usual significance of the dates that are

¹ *Roman Wall in Scotland*, p. 171.

² *Mil. Ant.*, p. 161.

³ *Roman Wall in Scotland*, p. 327. Roy is vaguer; writing, as we shall see, in 1771 or 1772, he says "some few years ago" (*Mil. Ant.*, l. c.).

⁴ James Macdonald, *Tituli Hunteriani*, p. 3.

attached to the titles of the plates? It will be remembered that Roy was in Scotland that very year, and that there is good ground for thinking that he travelled from the west to Edinburgh.¹ Castlecary would be on his way, and he may well have revisited the fort, examined the bath-house, and inspected Dundas's treasures. The style in which the altar is represented, the exceedingly careful note of scales, and the fact that the drawing of the bath-house is deliberately called a 'plan' and not a 'sketch', are all in favour of this hypothesis. If it be accepted, it adds an interesting incident to the tour of 1769. At the same time it enhances the value of the plan of the bath-house, inasmuch as we know that it came from a competent hand.²

We have now reached a point at which it will be convenient to glance back for a moment and recapitulate briefly what we have learned as to the gradual growth of Roy's collection of drawings. Arranging under their proper years those which are certain and those in regard to which we have been able to establish a high degree of probability, we get the following result:

1752

Chew Green,³ and 'Watling-street' crossing the mountains (plate xxii); Liddel Moat (plate xxiii); Castle-o'er (plate xxvi); and the bath-house at Netherby (plate xlv).

1752 or 1753

Wood Castle (plate viii); Birrenswark (plate xvi); and Birrens (plate xxiv).

1753

Castledykes (plate xxvii); and Lyne (plate xxviii).

1755

Ardoch (plate x and plate xxx); Posts near Ardoch (plate xxxi); Dealginross (plate xi); Strageth (plate xxxii); Battledykes (plate xiii); Keithick, Kirkboddo, and Lintrose (plate xiv); White Catherthun (plate xlvii); Brown Catherthun (plate xlviii); Inchtuthil (plate xviii); Camelon (plate xxix); the Roman Wall with its stations (plate xxxv); and Duntocher Bridge⁴ (plate xxxvii).

1764

Cleghorn (plate ix).

¹ See *supra*, p. 181.

² The drawing in the British Museum, it is fair to state, reads "in 1769", and the preposition accordingly appears in the corresponding 'List of the Drawings' there, from which it has been transferred to the printed 'List of Plates' (*Mil. Ant.*, p. 208). The title in *Mil. Ant.* is, however, an exact reproduction of that in the drawing in the Society's Library, and the drawings in the Society's set are, as a rule, the original sketches (see p. 196, *infra*). The insertion of 'in' in the revised edition may well have been an oversight.

³ As we shall see in due course (*infra*, p. 200 and p. 214), the drawings in Roy's original collection were, in these two cases, entirely different from the published plates.

1769

Channelkirk (plate vi); Torwood Moor (plate vii); Tassies-Holm (plate viii); Kreiginthorp and Reycross (plate xvii); and Castlecary bath-house, &c. (plate xxxix).

1771

Grassy Walls and Bertha (plate xii); the Eildons (plate xxi); and Auchendavy altars, &c. (plate xxxviii).

Among the first forty-eight plates (to which we shall do well to confine our attention meanwhile), we have still to account for three 'plans' of entrenchments, the drawings for all of which were undoubtedly made not later than 1771. That of 'the Roman post at Fortingaul, in Glen Lyon' (plate xix) is perhaps the earliest of these. We have already noted that Roy disclaims its authorship.¹ Presumably, therefore, he obtained it from one of his colleagues on the survey; and, if so, it must be older than 1755, when the survey came to an end. The 'plans of the camps in Pickering-moor, in Yorkshire' (pl. xi) clearly belong to the period when his theories about the campaigns of Agricola had begun to crystallize into their final form; that is, they are later than 1764. Pickering Moor is north-east from York. Roy was in York in 1769, and it is possibly to that year that we should assign his visit to these camps, which stood "on the Roman road leading from Malton to Dunsley, and in a high commanding situation".² This, however, is conjectural. Even greater uncertainty attaches to the 'Plan and sections of the Burgh-head on the Murray firth, the Ultima Ptoroton of Richard of Cirencester, and Alata Castra of Ptolemy' (plate xxxiii). The references to this site in the text³ are couched in terms that distinctly suggest personal observation. An opportunity for such observation may, of course, have occurred when the original survey was in progress, before Roy's transfer to the south of Scotland in 1752. On the other hand, it is not easy to see what motive he could have had for studying the promontory closely at a time when he knew little, if anything, of 'Alata Castra' and nothing whatever of 'Ultima Ptoroton'; there is no evidence that he was interested in Ptolemy till he had become familiar with the *De Situ Britanniae*, and the manuscript of that precious treatise was still reposing in Stukeley's desk when the great map and its creators were swept into the vortex of the Seven Years' War. We may, therefore, prefer to believe that the tour of 1771 (which was meant to be a garnering of the last sheaves of topographical detail) embraced a pilgrimage to the shores of the Moray Firth along 'Richard's' ninth Iter, and back again by his tenth.

There remains a certain number of drawings for which no special effort in the way of field-work was required. Thus, the 'View and plan of the Little

¹ See *supra*, p. 172.

² *Mil. Ant.*, p. 65.

³ *Ibid.*, pp. 131 f.

Pantheon, or Roman Sacellum, vulgarly called Arthur's Oon' (plate xxxvi) was avowedly based on material supplied by Gordon's *Itinerarium Septentrionale*. The various maps, again, were either compiled from books (plates ii and iii) or built upon data accumulated during the survey and remaining in Roy's custody (plates i, xix, xx, xxi, xxv, xxvii, and xxxiv). When we add to these the illustrations of the principles of castrametation as deduced from Polybius (plates iv, v, and xv), we have completed our enumeration of the collection which it was at first intended to place before the public. Indeed, in one respect we have gone beyond it, for the insertion of the plans of the two Catherthuns would seem to have been an afterthought, while the same is possibly true of the plan of the Netherby bath-house. The text was to consist of the book as now printed, as far as page 167, along with a single Appendix. The scope of this Appendix as defined in the 'Prefatory Introduction'¹ is somewhat vague: it is to contain "such things as may chance to occur during the course of the work, that tend to throw new light on any of the subjects treated on; or such as could not with propriety be classed under any of the general heads just now mentioned". In the body of the work a specific promise is given that it will deal with the groups of antiquities recently found at Castlecary and at Auchendavy.² Otherwise it is only alluded to in one or two marginal insets. One sometimes wonders why Roy decided to publish these particular inscriptions, when he has virtually nothing to say regarding any others. A conceivable explanation is that, apart from four Birrens altars and a Birrens tombstone, first noted by Pennant in 1772 and quite possibly unknown to Roy,³ they were the only Roman inscriptions from Scotland of which illustrations were not already available, either in Gordon's *Itinerarium* or in Horsley's *Britannia Romana* or in the *Monumenta Imperii Romani* issued by the University of Glasgow. A desire to round off his own book by bringing the *corpus* up to date would be natural enough, especially if he had the sketches.

Except for the Appendix, the book as designed was entirely finished by the summer of 1772. Always modest, Roy had shrunk from the task of discussing the inscriptions, and had invited Professor John Anderson of Glasgow to undertake the task. Anderson agreed, but did not carry it through until the beginning of 1773.⁴ In the interval new material for the Appendix was collected. From a summer excursion⁵ Roy brought back his 'Sketch of part of the country along

¹ p. xii.

² *Mil. Ant.*, pp. 160 f.

³ They do not seem to have been discovered when Pococke visited the district in 1750. On the other hand, four out of the five are referred to in a letter still extant in manuscript and dated September 25, 1770 (*Proc. Soc. Ant. Scot.*, vol. xxx, pp. 123 f., foot-note). So far as we know, Roy's last sojourn in the neighbourhood was in 1764.

⁴ Anderson's 'Observations' bear date 'January 2d, 1773' (*Mil. Ant.*, p. 204).

⁵ *Mil. Ant.*, p. 171.

the banks of the river Teme, between Lentwardine and Knighton, where it hath been supposed that the Britons under Caractacus were defeated by the Romans under Ostorius; to which are annexed plans of Caer Caradock, Brandon Camp, and Coxall Knoll' (plate xl). The explanatory 'dissertation', which is the first of the five 'detached pieces' that go to make up the Appendix, must have been written immediately afterwards. About this time, too, he fell in with Scheel's treatise on Roman castrametation, which was published at Amsterdam in 1660, and which contained not only the relevant extracts from Polybius, but also all that is extant of the handbook of Hyginus, *De munitionibus castrorum*. He had long known of the existence of the latter; "yet, from the scarcity of the piece, no opportunity had offered of consulting it."¹ It was now studied eagerly, along with the accompanying commentary, and proved so suggestive as to prompt the composition of a second 'detached piece', illustrated by five additional drawings (plates xli-xlv). We may confidently assign this to the autumn of 1772 or the early part of the following winter. 'No. III' of the Appendix is the brief account of the bath-house at Netherby. Anderson's contribution, which is printed as 'No. IV', arrived just after the turn of the year. The last of the 'detached pieces' is the short note on the two Catherthuns. The order in which 'No. III' and 'No. V' occur inclines one to attribute them to the winter of 1772-73, although it is of course possible that they were written much earlier.

The book having been completed, the next step was to set about the preparation of a fair copy. At this point the evidence of the two existing manuscripts becomes important, as a brief general account of them will show. It will be convenient to designate them B. M.² and S. A., after their respective resting-places. Both are folios, and in both cases text and plates are bound in separate volumes. Both bindings are certainly later than the date of Roy's death; two references in the minutes of the Council of the Society of Antiquaries prove that the drawings in B. M. were still on loose sheets in 1791,³ while a third records that on 14th February 1794 those in S. A. "were ordered to be cleaned and bound up".

Taking the text first, we find that B. M. was written out in a formal round hand by an amanuensis, doubtless from the author's original manuscript. Thereafter Roy himself revised it carefully more than once.⁴ In the interval between his first and his final revision, S. A. was copied from B. M. The amanuensis may have been the same; the testimony of the handwriting is inconclusive.⁵ If so,

¹ *Mil. Ant.*, p. 176.

² The reference number is 'King's MSS. 247, 248'.

³ The dates are 4th February and 29th March. See *infra*, p. 211.

⁴ Some of the corrections are certainly, others possibly, made by the scribe. But there are at least one or two others which are clearly in Roy's own hand, as can be proved by comparison with autograph letters of his, now in the British Museum.

⁵ On the whole, I am disposed to regard the two hands as different.

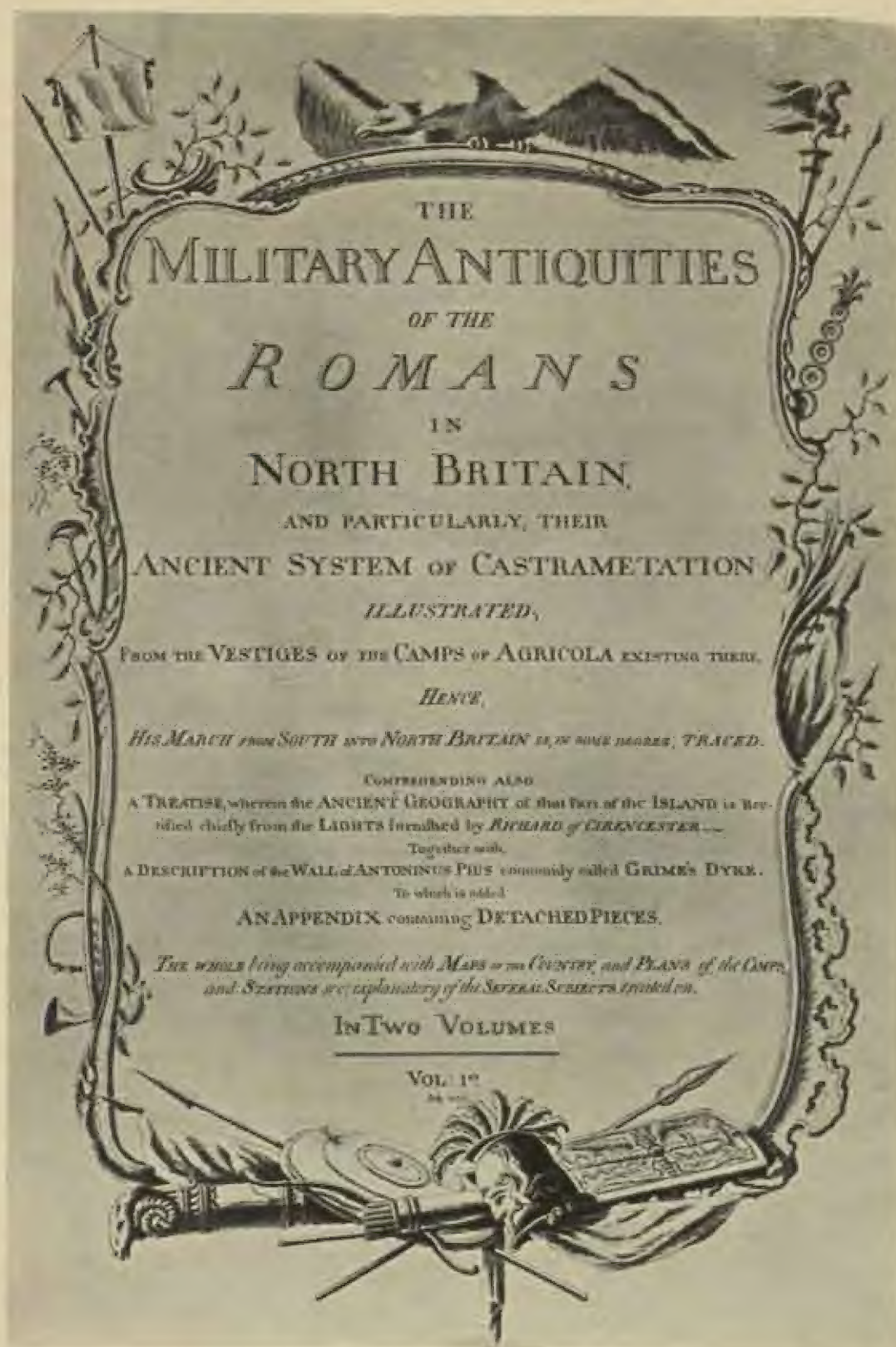


Fig. 1. Title-page of Volume I. From the British Museum MS.

however, he has done his work less carefully. Accidental omissions which result in *non-sens* and therefore betray a lack of intelligence, are more frequent. While the more flagrant of these, such as the omission of whole lines, have been rectified by the culprit on a re-reading, minor gaps seem to have escaped his notice and to have been supplied by Roy, or at all events under his direction, when he came to look through the whole. S. A., in short, is a less finished performance in every sense of the term. Thus, the references to the plates and to ancient authors, which appear as insets in the printed book, are inserted in the margin of B. M., but do not occur at all in S. A. The most striking of the other differences between the two manuscripts is that B. M. is supplied with a dedication to the King, which has no place in the printed book, and also with an ornamental title-page (Fig. 1). The latter has served as a model for the second title-page of the printed book, which is, however, perfectly plain, and which moreover fails to include the final words: "explanatory of the Several Subjects, treated on. | In Two Volumes | Vol: Ist | July 1773". These reveal a highly interesting fact which had been altogether lost sight of. The *Military Antiquities* was ready for the press fully twenty years before it was published.

The second volume of B. M. is likewise provided with an ornamental title-page, to which, of course, the printed book has nothing to correspond. It reads: "The | Military Antiquities | of the | Romans | in | North Britain | illustrated | Vol: II^d | Containing | The Maps and Plans referred to and which serve | to explain the Several Subjects treated on | in the First Volume | July, 1773" (Fig. 2). We need hardly hesitate to regard these title-pages, with their ornamental borders, as examples of Roy's own artistic skill. There is a marked affinity between their style and the style of the decorative work with which certain of the plates are embellished, the Roman military *motif* being everywhere conspicuous. Immediately after the ornamental title-page comes a 'List of the Drawings contained in the Second Volume', occupying four pages, and showing, in a separate column, the page or pages of Vol. I on which each plate is alluded to. So far as it goes, the 'List' itself is identical with the printed 'List of Plates'. But it is important to note that it contains only forty-eight entries as against fifty-one. This means that when the book was, as it seemed, completed in July 1773, its plan provided for forty-eight plates and no more.

The 'List' is followed by the drawings themselves, numbered neatly in red from 'I' to 'XLVIII', and corresponding generally, though not precisely, to the first forty-eight plates of the printed book. Two unnumbered sheets are bound up at the end—a drawing of the 'Plan of Agricola's camp at Rae-Dykes near Ury' (plate I), and an engraving which might readily enough be mistaken for a spare copy of the 'Mappa Britanniae Septentrionalis' (plate i). The absence of any number confirms the view that the former does not belong to the original series.

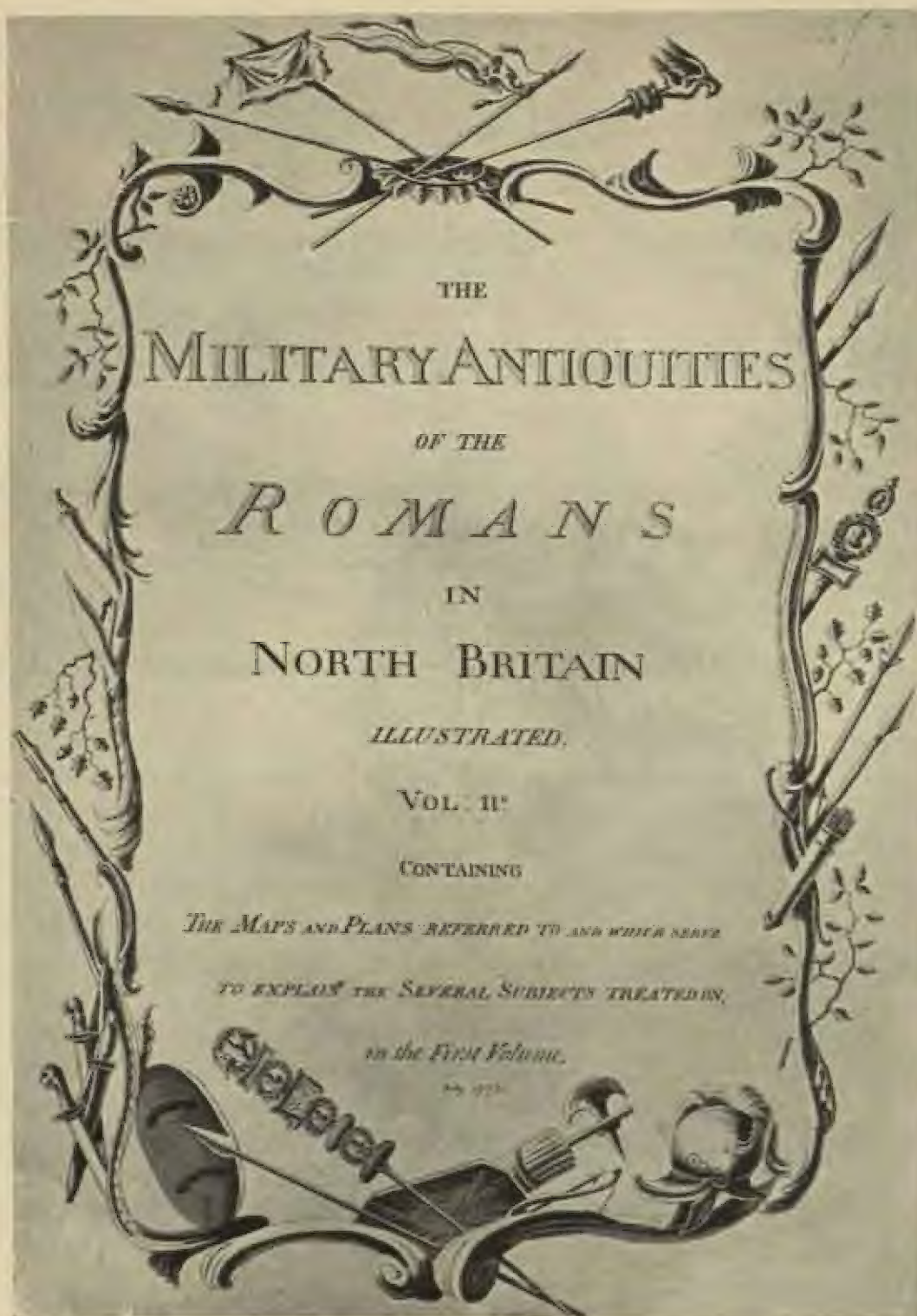


Fig. 2. Title-page of Volume II. From the British Museum MS.

A closer inspection of the latter modifies the first impression. In point of fact, with one trifling exception—the correction of a mistake in the Latin of the title¹—the engraving in B.M. is an exact replica of 'I' in the series of drawings, but it lacks certain features which are present in the engraved 'Mappa Britanniae Septentrionalis' as ultimately published. Yet the two are in most respects absolutely identical. They represent, indeed, an earlier and a later 'state' of one and the same plate. The re-discovery of this earlier 'state', and of the drawing from which it was copied, renders possible some interesting deductions. But, before any endeavour to indicate these is made, it will be well to give a short description of the drawings as preserved in S.A.

The correspondence between the plates as published and the collection of drawings appended to S.A. is in many ways closer than is the case with B.M. As in B.M., there is no drawing of the 'Plan . . . exhibiting the ancient camp of Re-dykes near Glenmailen' (plate li). Otherwise the collection is complete, including a drawing of the 'Plan of Tibbers-Castle' (plate xlix), which is wanting in B.M. In reality it is more than complete, for it contains two different versions of the 'View of Duntocher bridge' (plate xxxvii), one of which we shall find by and by to be an interloper. On the other hand, the 'Mappa Britanniae Septentrionalis' (plate i) is not represented by an original drawing at all. In place of the drawing there is a copy of the later 'state' of the engraving. It may be added that the most immediately obvious distinction between the two 'states' is to be found in the title. Fig. 3, which is reproduced from B.M., shows the original title, drawn in all likelihood by Roy's own hand. Except for the alteration of "per Veterum" into "perveterum", the title of the earlier 'state' is virtually identical. In the later 'state', as can be seen by turning to the printed book, the words "*à G^m. Roy Londini 1774.*" have been inserted within the decorative framework, and the following legend placed beneath: "*TABULAM HANC THOMAS VINCENTIUS REYNOLDS GULIELMI ROY HAERES, SOCIETATI ANTIQVARIORVM LONDINENSIS D: D:*" The description "PL I" is also new.

There can be no doubt as to the drawings in S.A. having been executed by Roy himself; his style, as revealed by the signed examples of his work in the British Museum,² is too individual to admit of mistake. They are admirably finished and delicately coloured. Those in B.M. can also be confidently attributed to Roy. Here again the style is characteristic, in spite of certain significant differences which become apparent as soon as a drawing from B.M. is laid

¹ The original has 'per Veterum', which is corrected in the engraving into 'perveterum'. Roy cannot be acquitted of responsibility for the mistake, since it recurs in the original title of plate ii (see fig. 4, p. 197, *infra*) and also in the manuscript 'List of Drawings', from which latter it even found its way into the printed book (p. 207). The error was natural enough for one who was not a professional scholar, and who was probably indebted to a friend for the titles.

² See *supra*, p. 172.



Fig. 3. Original title of plate i. From the British Museum MS.

alongside of its counterpart from S. A. In the former, many unessential details are omitted, while really significant ones are emphasized; light and shade are thrown into stronger relief; the colouring is simpler; some names are left out as unimportant; others are added or brought into greater prominence. In a word, there has clearly been a conscious endeavour to produce something which would lend itself readily to copying by an engraver.¹ As might have been anticipated, it is in the maps showing the relative situations of camps and forts (e.g. plates xx, xxv, and xxvii) that the modifications just described are most conspicuous, for it is there that there was most room for improvement. But the same tendency can be detected everywhere, and it manifests itself in various ways.

In S. A., for instance, the scale is usually given in English lineal measure only, whereas in B. M. it is almost always reinforced by a parallel scale in terms of Roman measurement. And there are a number of minor improvements, such as the introduction of an additional section here and there, or the better arrangement of drawings where more than one appear upon the same sheet. Finally, one may search S. A. in vain for the tasteful decorative devices that are employed, as opportunity offers, to relieve the monotony of the drawings in B. M. The ornamental title of the 'Mappa Britanniae Septentrionalis' has already been illustrated. The two maps that follow are similarly provided. In the case of the first (fig. 4), where the recurrence of the erroneous "Per Veterum" will be observed, the legend is inscribed on a *scutum*, which leans with other arms against a tree, forming a kind of trophy.² The second (fig. 5) displays a variation of the same design, the shield being a *clipeus* and the interior of a Roman camp appearing in the background. Other examples are recorded in the Appendix in connexion with the plans of Grassy Walls (plate xii) and Inchtuthil (plate xviii), where blank spaces are utilized for embellishment.

Roy's purpose, in fact, is clear, and it subsequently found definite expression in his will. Unfortunately, when the book came to be given to the world, those responsible for its publication disregarded his intention, quite possibly through inadvertence. In preparing the plates, the engraver worked systematically upon the drawings in S. A. as his model, so that the result is less satisfactory and less telling than it would otherwise have been. It is true that the better guide has sometimes been followed. Thus a section that does not occur at all in S. A. has been introduced from B. M. into plate xxxii. Such isolated exceptions, however, do not affect the position as already stated. The drawings in S. A. have formed the basis of the engraved plates; and that not merely

¹ The contrast between pl. XXIX and pl. XXX is instructive.

² A very sketchy reproduction of this design is found in the corresponding drawing in S. A., which is, however, quite possibly a copy, made long after Roy's death: see *infra*, p. 213).

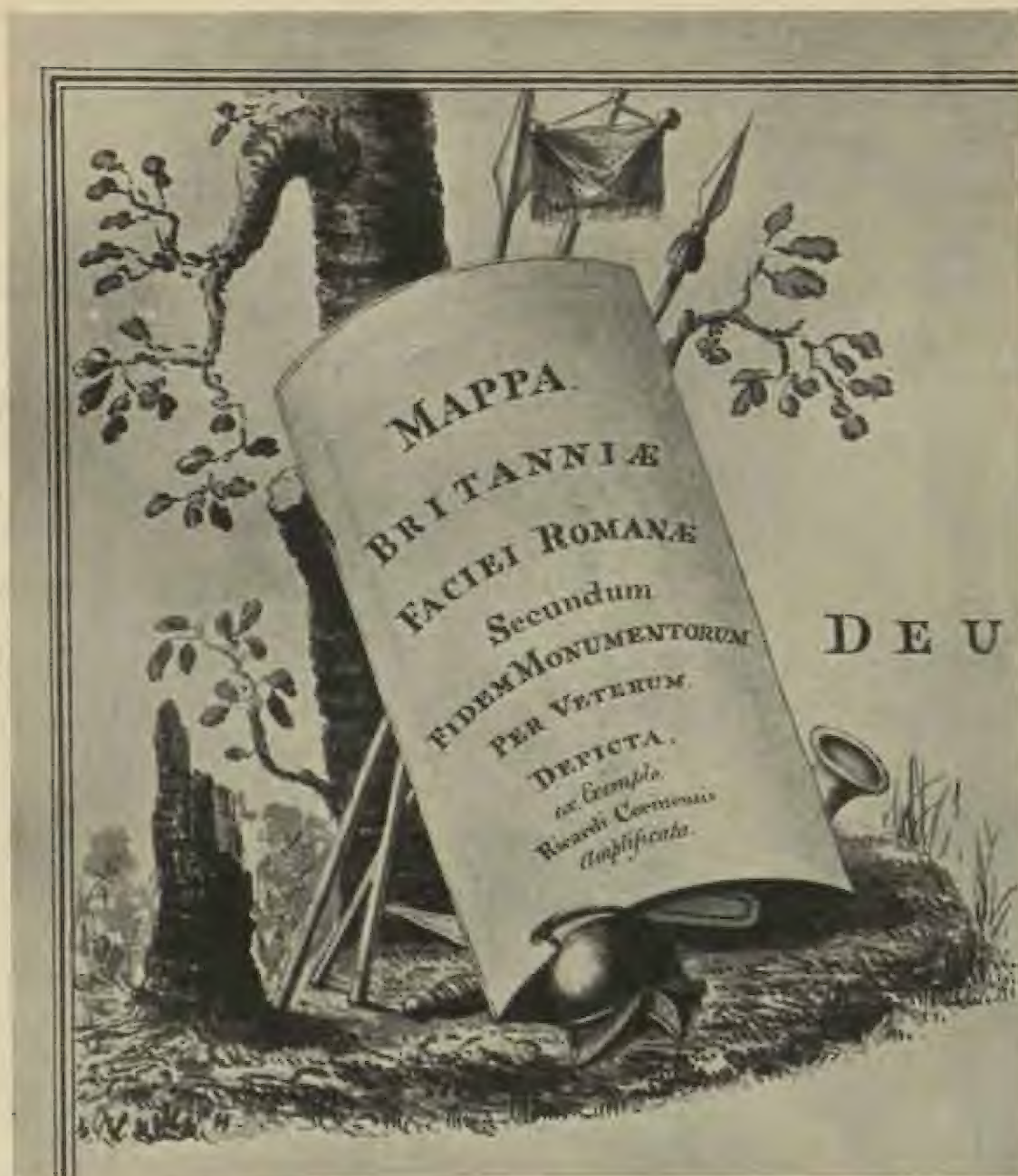


Fig. 4. Original title of plate ii. *From the British Museum MS.*



Fig. 5. Original title of plate iii. From the British Museum MS.

as regards their general character, but also as regards the bulk of the details which they embody. As a rule, no attention has been paid to minor improvements, while one or two of considerable importance have also been overlooked. The double system of scales, for instance, has not been adopted.



Fig. 6. Original drawing of Arthur's Oon. From the British Museum MS.

The plan of the Netherby bath is also a case in point, for there B. M. has been wholly set aside, in spite of its manifest superiority.¹ For yet another example we may turn to the view of Arthur's O'on from the B. M. drawing (fig. 6).

¹ See the reproduction in pl XXVII, *supra*, which should be compared with the *Mil. Ant.* plate as engraved (plate xlvii).

Note the picturesque little group of figures in the left foreground, obviously meant to give balance to the composition and so to convey a more pleasing impression, and therefore clearly a later addition. The corresponding space is blank in the S. A. drawing. It is blank likewise in plate xxxvi of the printed book, in the preparation of which everything that savours of adventitious ornament has been rigidly eschewed. The decorative title of the 'Mappa Britanniae Septentrionalis' is only an apparent exception, for plate i was engraved in Roy's lifetime and under his personal supervision. To establish this point, we must make a closer comparison between the earlier and later 'states', both of which, by the way, bear in the left-hand corner the signature of J. Cheevers, who was therefore the original engraver.

An examination of the body of the map shows that, in the interval between the printing of the two 'states', three new sites have been added. These are 'Agricola's camp' at Rae-dykes near Stonehaven, the 'Roman camp' at Re-dykes on the banks of the Ythan, and 'Agricola's camp' at Towford¹ in Roxburghshire. If it is borne in mind that the plans of the two most northerly of the three are not included in the 'List of the Drawings' in B. M., the non-appearance of their sites on the earlier 'state' will not seem in any way surprising, seeing that this 'state' is an exact replica of the original 'Mappa Britanniae Septentrionalis' of July 1773, which is also, of course, the date of the 'List'. At first sight the absence of Towford looks more puzzling, since, in the series as published, a plan of it occurs as far back as plate xxii. But the difficulty vanishes when it is realized that plate xxii is copied from an S. A. drawing, and that the corresponding drawing in B. M. contains no plan of Towford and gives no indication of its site. The B. M. drawing, in fact, conforms in all respects to the description attached to it in the B. M. 'List of the Drawings', a description which the editors have *per incuriam* allowed to be retained in the 'List of Plates' as printed in the *Military Antiquities*: 'Plan of the Roman station and adjoining camps at Chew Green on the head of Coquet, on the border between South and North Britain, supposed to be the Fines mentioned in Richard of Cirencester; to which is annexed a plan showing the pass by which the Roman Watling-street crosses the mountains that separate South from North Britain, in leading from Bremenium by Chew Green, and the intrenchments at Woden Law, towards Trimontium'. Neither here nor in the text of the book is there any suggestion of the existence of a camp at Towford. It must still have been unknown to Roy in July 1773, and its case is thus precisely parallel to that of the camps in Kincardine and Aberdeen.

Our next concern is to try and determine the significance of the date '1774'.

¹ The engraver blunderingly calls it 'Totford'.

which is found on the later 'state', but not on the earlier one. Clearly it cannot refer to the year in which the map was drawn, for the drawing was finished by July 1773. Equally clearly it cannot refer to the year to which the later 'state' belongs, for it makes its appearance simultaneously with a note recording that the plate had been presented to the Society of Antiquaries of London by Roy's heir, and that note cannot have been added till after Roy's death, in July 1790. The only other alternative is to suppose that, in spite of its absence from the earlier 'state', its purpose is to mark the year in which the plate was originally engraved. But, before this hypothesis can be accepted, it will be necessary to produce confirmatory evidence. Such evidence is not very difficult to find.

Writing in 1780, Gough, in his *British Topography*,¹ tells us that the so-called Duke of Cumberland's Map had been "reduced" by Roy, who had "engraved a few for presents". We have already had occasion to observe how little reliance is to be placed on the accuracy of Gough's references to Roy and his work.² We need not, therefore, attach too much importance to the alleged motive. But, even if that be set aside as improbable, we are scarcely justified in rejecting the whole story as untrue. We may at least infer that copies of the 'Mappa Britanniae Septentrionalis' were in private circulation in Roy's lifetime. Naturally these would be copies of the earlier 'state', since the later 'state' is subsequent to 1790. This deduction is curiously borne out by Ainslie's nine-sheet map of Scotland, which was issued in 1789. Ainslie's map is on a much larger scale than Roy's, and contains many more entries. But, so far as Roman sites are concerned, it gives precisely the same information. The remains to which Roy appends the designation "Castra Agricolae" are camps of Agricola for Ainslie too; and wherever Roy associates an entrenchment with a particular legion, as he does Birrenswark with the Sixth, Ainslie follows suit. In short, the agreement with the 'Mappa Britanniae Septentrionalis' is complete. The agreement, however, is with the earlier 'state' of the engraving, and not with the later one. Ainslie does not mark either the camp near Ury or that on the banks of the Ythan; and, although he shows an entrenchment at Towford, he does not describe it as Roman.

Ainslie takes us back to 1789, and Gough to 1780. There is still a gap of six years to cross before the year we have in view is reached. To bridge it over we must appeal once more to the original drawings. As already indicated, that numbered 'XXII' in B.M. contains only two plans—one of Chew Green, and one of the pass by which the Roman road crosses the Cheviots, the camp

¹ Vol. ii, p. 586. The whole passage is quoted *infra*, p. 203.

² See *supra*, p. 173, foot-note ².

at Towford not being marked upon the latter. The corresponding drawing in S.A., from which plate xxii as published has been copied, shows three—a new and greatly superior plan of Chew Green, the old one of the pass across the Cheviots, with the camp at Towford inserted, and an entirely fresh item in the shape of a 'Plan of Agricola's camp at Towford in Roxburghshire'. Both the new plan of Chew Green and the plan of Towford are dated 'September 20th, 1774'. This is exceedingly helpful. We know definitely that when Roy finished his book, in 1773, he had not yet seen Chew Green, and that he cherished a wish to visit it in order to check the accuracy of the observations made by his colleagues of the survey in 1752.¹ We know also that he was in Central Scotland in 1774; for, in a paper on 'Experiments for measuring Heights with the Barometer', which he contributed to the *Philosophical Transactions* of the Royal Society, he mentions incidentally that in the course of that year he had personally calculated the height of Schiehallion by "geometrical operations, depending on a base measured in the plain near Taybridge".² Finally, since the drawings on plate xxii are called 'plans', the observations on which they are based must have been taken with the aid of proper surveying instruments.³

These facts enable us to form a clear idea of the sequence of events. When Roy set out for Scotland in 1774, he determined to survey Chew Green *de novo*, and equipped himself accordingly. If we may judge by the lateness of the date (20th September), the visit took place on the return journey. Instead of travelling back to England, as he had done before, by what is now known as the 'Waverley' route, he must have followed the track of the Roman road past Jedburgh to Streethouse, and thence round the shoulder of Woden Law to the head-waters of the Coquet. In doing so, he would inevitably discover the camp at Towford. It lies so close to the line of route that even to-day, when presumably its remains are less conspicuous, it is hardly possible to miss it. An experienced surveyor like Roy would find it an easy matter to transfer the necessary measurements to his note-book, and then push on in ample time to carry through the more complicated task that awaited him as soon as he crossed the border into Northumberland. But, if this was what happened, why was Towford not inserted in the first 'state' of the 'Mappa Britanniae Septentrionalis'? There can only be one explanation. It was because the map was already finished, the plate engraved, and the copies printed off, before the discovery was made. The first 'state' of plate xxii would therefore appear to belong to the spring or early summer of 1774.

Here a brief digression may be permissible, in order to lay once for all

¹ See *Mil. Ant.*, p. 117, foot-note.

² *Phil. Trans.*, vol. lxvii, p. 721.

³ See *supra*, p. 178.

a geographical ghost which made its appearance while Roy was still alive, and which has haunted his memory persistently since his death. In the *Dictionary of National Biography* it wears the following guise:

"At a later date [than 1755] the [Duke of Cumberland's] map was reduced by Watson and Roy, engraved on a single sheet by T. Chievos [*sic*], and published as the king's map. Roy's love of archaeology showed itself in the insertion of the names of Roman places and camps."¹

In giving currency to this statement Colonel Vetch is only repeating what had been said by the biographers who preceded him. His immediate authority would seem to have been the writer of the obituary notice in the *Gentleman's Magazine*. But it is plain that the ultimate source was Richard Gough, who, as far back as 1780, thus describes 'the king's map' in a paragraph of that section of his *British Topography* which deals with the 'Roman Geography of Scotland':

"Mappa Britanniae Septentrionalis faciei Romanae secundum fidem monumentorum perveterum depicta ex Ricardo Corinensi, monacho Westmonasterii, emendata et in recentioribus geometricis atque astronomicis observationibus accommodata. J. Cheevers sc'. a single sheet 18 inches by 23½; drawn by Colonels Watson and Roy, and called the king's map. It has many camps, a good number of Roman names, a few modern ones of towns, and all the rivers and hills properly laid down."²

There can be no doubt that Gough regarded 'the king's map' as something entirely different from that which Roy had "engraved for presents". At the risk of some repetition it will be well to make this clear by quoting the relevant passage in full. It occurs in the section of the *British Topography* headed 'Maps', and runs thus:

"Colonel Roy of the artillery, and his engineers under Colonel Watson in the winter of 1746 made an actual survey of this kingdom (which goes under the name of the duke of Cumberland's map), on a very large scale, most accurately pointing out every smallest spot, with the Roman camps, etc., the original in the office of ordnance. He reduced it, and engraved a few for presents. From his observations the Roman map of North Britain, mentioned before, p. 561, was engraved."³

It will be noted that the final sentence is conclusive: it draws a sharp distinction between the map "engraved for presents" and the map "mentioned before, p. 561", which was the so-called 'king's map'. Attention has already been called to the unfortunate influence exercised by this passage in distorting the facts as to Roy's connexion with the survey, the medium being the obituary

¹ *Op. cit.*, vol. xlix, p. 372.

² *Op. cit.*, vol. ii, p. 561.

³ *Op. cit.*, vol. ii, p. 586.

notice which appeared in the *Gentleman's Magazine*.¹ For the most part the anonymous writer was content to follow his guide blindly. But in one respect his vision was clearer. After copying the misleading paragraph as far as "presents" almost *verbatim et literatim*,² he substitutes for the last sentence the paragraph from p. 561 beginning "Mappa Britanniae Septentrionalis", and connects the two by inserting the words "under the title". He therefore realized that there were not two engraved maps, but only one. We may go a step farther and affirm that Watson and Roy never collaborated either in the drawing or in the reduction of any map of the sort. The so-called 'king's map' is neither more nor less than the earlier 'state' of plate i of the *Military Antiquities*. The measurements given by Gough suggest this at once. The two titles are also in perfect agreement, save only that in Gough "Corinense" has become "Corinensi". Lastly, the map catalogued as 'the king's map' in the British Museum Collection proved, upon examination, to be merely an example of the now familiar earlier 'state'. The Museum authorities had been disposed to attribute it to the years immediately preceding 1760, whereas the true date is, as we know, 1774. The mistake is in all likelihood due to the traditional but erroneous association with Watson, for the establishment of which Gough is alone responsible. Watson died in November 1761, in happy ignorance (we may believe) of the work of 'Ricardus Corinensis', while several of the Roman sites marked upon the map, such as Cleghorn, Torwood Moor, and Grassy Walls, were only discovered in the course of the next decade.

It may be conjectured that the title of 'the king's map', which the engraving had acquired at least as early as 1780, was bestowed upon it because the original was known to be in the King's Library. When did it find its way thither? And why did Roy have it engraved at all? Taking the latter point first, we may dismiss Gough's idea that Roy's action was prompted simply by a desire to be generous to his friends. It is surely much more probable that, when he had put the finishing touches to his book, he made an endeavour to arrange for its publication. On this hypothesis the engraving of plate i would be of the nature of a preliminary essay, some copies of which would quite naturally be circulated privately. When sufficient support for his scheme was not forthcoming, he apparently deposited the more perfect copy of the manuscript in the Royal Library. And, if we have regard to the current of public events, it is not difficult to understand why the time should have proved inopportune for floating a work so expensive. The relations between Britain and her American colonies had

¹ See *supra*, p. 163.

² His main change, it will be remembered, was greatly for the worse: he altered "Colonel Roy of the artillery" into "While colonel of artillery, he", and so started a long train of error.

long been strained. The tension was now extreme. It was in December 1773 that the tea-chests were emptied into Boston Harbour, and by the summer of 1774 it must have been very generally realized that a rupture was inevitable. Roy himself tells us explicitly that the outbreak of the American War meant the indefinite postponement of his long-cherished hopes for a proper Government survey of Britain.¹ We can hardly wonder that the lesser enterprise should have been swamped by the rising tide before it could be launched.

The explanation just suggested fits in admirably with the date at which the volumes appear to have been presented to the king. This we are in a position to determine within fairly narrow limits. The manuscript must still have been in Roy's possession in the early part of 1774, for it was then that plate i was engraved. That it had passed out of his hands before September of that year is plain from the absence of any reference to Towford, as well as from the presence of the grossly inaccurate plan of Chew Green; it is impossible to believe that he would have allowed his *magnum opus* to be transferred to Buckingham Palace² without removing all the blemishes of which he was conscious, particularly as we can prove that, before parting with it, he subjected it to a careful revision. The Appendix will show that one or two improvements were introduced into the text of B. M. after the text of S. A. had been copied from it. Evidence even more convincing is supplied by plate xlv. Fig. 7 is a reproduction of this plate as it is found in S. A. If it be looked at along with the published version, a marked difference in arrangement will be manifest at once. On a closer comparison it will be seen that the difference is due to the fact that, at the beginning of the series of drawings which it contains, there has been introduced an additional representation of 'The Polybian Camp of a Consular Army', designed on the supposition that the auxiliary cavalry attached to a Roman legion were 900 strong, instead of 600 strong only, as Roy had at first assumed. 'Fig. I' of S. A. thus becomes 'Fig. I B', the new-comer being designated 'Fig. I A'. Turning next to B. M., we find that there the diagrams have originally been arranged and numbered exactly as in S. A. Subsequently, however, 'Fig. I' has been altered into 'Fig. I B', while a small square of paper, with 'Fig. I A' drawn upon it, has been laid above, and pasted down along its left-hand edge so that it can be raised and replaced like the leaf of a book.³

¹ *Phil. Trans.*, lxxv, p. 387.

² It was at Buckingham Palace (the old building) that the King's Library (George III's) was housed before its transfer to the British Museum.

³ It must have been at the same time that there was added to B. M. (p. 58) the last sentence of what has become the first foot-note on p. 51 of the *Military Antiquities*. It is not found in S. A. (p. 78), and the reference to the amended illustration is clear.

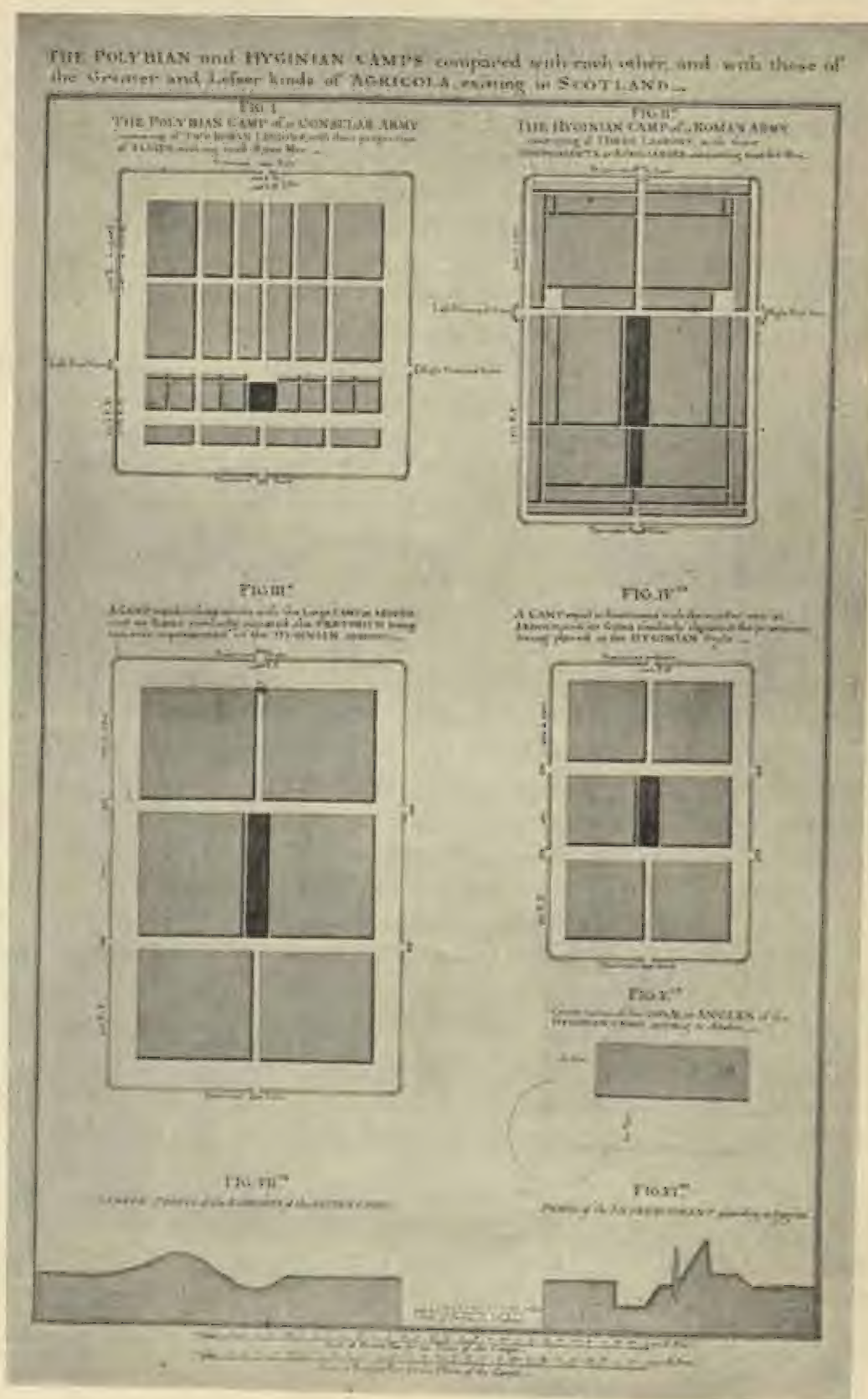


Fig. 7. Original drawing of plate xlv. From the Society's MS.

The complete rearrangement in the published version has been effected by the engraver.

The case for revision, and for revision prior to September 1774, would thus seem to be conclusive. Everything points to the revised manuscript having been transferred to the Royal Library about midsummer of that year. The autumn expedition to Chew Green indicates that Roy's antiquarian zeal was in no way damped by his failure to secure publication. But, when war actually broke out a few months later, his interests and his energies alike would be absorbed by the struggle in which his country was engaged. Agricola had to give way to Washington. Roy did not take the field, doubtless because it was felt that his organizing talent could be more profitably utilized at home. And, when peace was signed in 1783, it was not archaeology but surveying that made the more insistent call on his attention. So far, the parallel with what had happened twenty years before is extraordinarily close. This time, however, there was to be no Roman revival. His measurement of a base-line on Hounslow Heath, undertaken in the first instance for his own amusement, attracted much public notice, the king paying a personal visit to the scene of operations. Shortly afterwards he was commissioned by the Government to triangulate the country between London and Dover, the ultimate object being to determine accurately, in conjunction with a similar French mission, the relative positions of the observatories of Greenwich and of Paris. In 1785 the Royal Society, of which he was a Fellow, awarded him the Copley medal for his work on Hounslow Heath. The area of his survey of south-eastern England gradually extended, and the taking of the necessary measurements kept him fully occupied as long as his strength held out. In November 1789 growing ill health drove him to Lisbon for the winter. Returning in spring, he was faced with the task of seeing the final report on his labours through the press. In July 1790 he died very suddenly, leaving two or three sheets still uncorrected.

During the later years of his life the fame he had won as a geodesist rather tended to eclipse his reputation as an antiquary; and on the whole we may be certain that, if a choice had to be made, this is what he himself would have wished. By the faithful, however, he was still rightly regarded as the leading authority on Roman Scotland. We shall hear shortly of plans of newly-discovered camps being submitted to him for his opinion. He had been elected a Fellow of the Society of Antiquaries of London on 21st March 1776, rather more than a year after the admission to the Society of his old friend General Melville,¹ who had returned from the West Indies in 1771. The existence of the manuscript of the *Military Antiquities* was a matter of common knowledge. A privileged few

¹ Elected 12th Jan. 1775.

must even have been allowed to read it, for, in the private letter of 1788 which has already been referred to, Melville speaks of it as "a very good performance".¹ It is possible that Roy may have looked forward to a day when he would have leisure to revise it and bring it up to date, and in this connexion it is perhaps significant that he should have been careful to keep a copy of the plan of Raedykes in Kincardineshire, which cannot have reached him earlier than 1785. But, if he cherished any such intention, no serious endeavour to realize it was ever made. Otherwise some reference to Towford and to the amended plan of Chew Green would certainly have been introduced into his own copy of the text. It is interesting to reflect that another visit to Melrose might have enabled him to include a convincing confirmation of his conjecture as to the true site of Trimontium. The earliest of the recorded finds of Roman inscriptions at Newstead was made in 1783.² One wonders whether news of it ever reached him.

His will, a copy of which may be seen at Somerset House, gives us an illuminating glimpse of his ultimate attitude towards the *Military Antiquities*, showing that, while he recognized the necessity for further revision, he also contemplated the possibility of posthumous publication. The document is dated 13th November 1786, and the executors are Colonel David Dundas, Quarter-Master-General in Ireland, and Mr. James Livingstone, of Shepperton, in the county of Middlesex. The principal heir and residuary legatee is Ensign Thomas Vincent Reynolds, of the 34th Regiment of Foot, "now in Canada", son of Mrs. Mary Hayes, for whom and for whose daughter, Catherine Hayes, provision is made by means of annuities. Colonel Dundas was, of course, Roy's old colleague in the original survey of Scotland.³ Ensign Reynolds, as we learn from one or two casual allusions in the *Philosophical Transactions*, had been closely associated with him in the measurement of the Hounslow Heath baseline, being responsible more particularly for the plan.⁴ In spite of the absence of any specific statement to that effect in the will, it is natural to believe that he was a relative, seeing that his mother and his half-sister were also provided for. Mrs. Hayes may possibly have been a younger sister or, alternatively, a cousin of Roy.⁵ The relevant part of the document runs thus:

"I request that Colonel Dundas will take the pleasure of a most gracious sovereign with regard to the manuscript map of Scotland remaining in my custody he having

¹ *Proc. Soc. Ant. Scot.*, vii, p. 31.

² See *supra*, p. 166.

³ As already indicated (*supra*, p. 163), the parish register of Carlisle records the baptism of two sisters—Grizel (1723) and Susanna (1728). I have not been able to find any trace of a third. But it would be hazardous to deny the possibility of her existence, and it is worth pointing out that, if a

⁴ Curle, *A Roman Frontier Post*, p. 140.

⁵ *Op. cit.*, lxxv, p. 417.

been employed in the execution of that map. I bequeath to Colonel Dundas all my Manuscripts Orderly Books and Drawings relative to Prince Ferdinand's campaigns in Germany as being well qualified to extract something useful from rough materials of that sort. Of the drawings there are several duplicates. When that happens to be the case he can give Ensign Reynolds one copy. I bequeath to Ensign Reynolds my gold watch and also the Gold Medal of the Royal Society whereon my name is engraved. The Books of Antiquities not being yet arranged as completely as it should be I had thought of leaving to the Society of Antiquaries. My executors will do in this respect as they judge best. If at any time the collection should be published the King's copy would be the best to engrave the drawings from."

The upshot of Roy's request was that, as he had himself intended, or at least hoped for, the great map passed into the King's Library, which is now housed in the British Museum. With it there went a considerable mass of other material relating to the survey—some of the original drawings of Roman stations,¹ and two or three reduced copies of the map as originally protracted.² To one of those there is attached a document which is of some interest, partly because it bears witness to the promptitude and thoroughness with which Dundas discharged his commission, and partly because the transaction disclosed may possibly have been the germ whence sprang Chalmers's allegation that Roy's 'Mappa Britanniae Septentrionalis' had been "drawn by Thomas Chamberlain, the skilful draughtsman of the Tower drawing-room".³ Some time before his death Roy had placed in Chamberlain's hands a reduced and coloured, but unfinished, copy of the great map on a scale of 2½ miles to the inch, and had instructed him to prepare a copy of it on the still smaller scale of 6 miles to the inch. When the end came in July 1790, the work was still incomplete. Dundas apparently called in the new copy just as it was, along with the archetype, and added both to the collection before it was moved to Buckingham Palace. This we gather from the document referred to, which is a letter headed 'Tower—

third daughter were born, it would be in accordance with old Scottish custom that she should be given her mother's name of Mary. It may be convenient to set down here the few facts that are ascertainable as to the career of Reynolds, as kindly collected for me by Mr. John A. Inglis. On 13th August 1784 he was gazetted ensign in the 34th Regiment, which had been in Canada since 1782. He became lieutenant in 1788 and captain in 1791. In the latter year he was 'disbanded', remaining on half-pay till 1793, when he secured a captaincy in the first battalion of the 'Scotch Brigade'. Two years later he gained his majority in the 30th (Cambridgeshire) Foot. He was given the army rank of lieutenant-colonel in January 1799, but he continued to serve on the strength of the 30th Regiment as major until June 1801, when he retired. As, according to the Regimental History, he died in the same year, his retirement was probably due to ill health.

¹ See *supra*, pp. 168 and 172.

² See *Catalogue of the Manuscript Maps, etc., in the British Museum* (1844), ii, p. 332 f.

³ *Caledonia*, ii (iii), p. 64. The whole passage is quoted *supra*, p. 164.

Oct. 22, 1789', a patent error for '1790', since Roy is alluded to in terms which show that he was already dead. The text is as follows:

"Mr. Chamberlaine presents his respects to Gen. Dundas and have herewith sent the Plan of Scotland being in five parts which Mr. C. had of the late Gen. Roy—also the Plan in two parts that Mr. C. was reducing therefrom.

There is wanting in the unfinished plan to compleat it sevl Towns Roads and part of the Heights.

The inclosed card shows the proportion the Plans are in to each other."

The executors seem to have been equally prompt in presenting the 'Books of Antiquities' to the Society of Antiquaries of London. The Minutes of Council do not appear to contain any explicit record of their receipt, but under date 9th December 1790 it is noted that "the Secretary was directed to make out a list of the drawings lately presented to the Society by the late Major General Roy". The gift was hailed with an enthusiasm that would have gratified Roy, if he had lived to hear of it. The Introduction was read as a communication to the Society at its ordinary meeting on 27th January 1791, and the reading aloud of other portions of the text provided the staple fare at no fewer than seven other meetings during the remaining portion of the session.¹ The idea of publication must have been mooted almost at once, for on 29th March a committee of four, including the President, was appointed to obtain estimates. On 11th April it was "Ordered: That it be recommended by the Council to the Society to direct the publication of the work bequeathed to them by the late Major-General Roy". Three days later the recommendation was put to the Society and "passed in the affirmative". Estimates had been quickly lodged, and on 5th May the Council decided "That a Committee for examining the estimates delivered in by the engraver and printer, for engraving and printing the work bequeathed to the Society by the late Major-General Roy, and for superintending the publication of the same, be appointed; and that the Committee do consist of the President, Vice-Presidents and officers of the Society, the Rev. Mr. Cracherode, Mr. Lysons, Mr. Barnard, and Mr. Wyndham".

The question of the engravings was settled within little more than three weeks. On 23rd May the estimate for these, which the Committee had apparently succeeded in reducing somewhat, was accepted by the Council, and "the Maps of General Roy were accordingly delivered to Mr. Basire for the purpose of engraving them". The arrangements for printing, relatively a much simpler

¹ These were the description of the Antonine Wall (17th, 24th, and 31st March), the account of the Roads (7th and 14th April), Professor Anderson's Appendix (30th June), and the chapter on Agricola's Temporary Camps (7th July).

matter, went forward in more leisurely fashion. But about a year later a certain Thomas Haynes was "employed to transcribe the MS. of the late Major General Roy, in the course of the Summer".¹ On 3rd July 1792 the Council determined "that General Roy's Book of Military Antiquities in North Britain be printed at the Shakespeare Press", and further "that a Committee be appointed to superintend and direct the printing of the above mentioned work; and that the Earl of Leicester, President, Sir Henry Charles Englefield Bt., Frederick Barnard Esq., John Topham Esq., Thomas Astle Esq., and the Rev. Thomas William Wrighte be named of the Committee". Those who are familiar with the *Military Antiquities* will recognize in this list the names of the Fellows who appear on the fifth page as its official sponsors. If, however, they choose to re-examine that page in the light of the foregoing narrative, they will see that the Editorial Committee had a somewhat easy conscience as to diplomatic accuracy. The alleged extract from the Minutes of Council of 11th April 1791 is not a 'true' extract. Apart from minor alterations, it 'telescopes' into the original resolution of 11th April 1791 decisions that were not arrived at until 5th May 1791 and 3rd July 1792 respectively. At the same time no mention is made of the appointment or the labours of the first Committee on publication.

After the lapse of more than a century these discrepancies, though they remain curious, have lost all practical significance. It is more to the point to note that the Council seem very quickly to have discovered that, while the two manuscripts were to all intents and purposes the same, the collection of drawings which had been received from Roy's executors did not correspond exactly to that which Roy had deposited in the Royal Library sixteen or seventeen years before. On 4th February 1791 it was "Ordered: That the President be requested to make such application, as he shall judge most proper, for permission to have copied such of the drawings in his Majesty's collection, of the late Major General Roy, as are not in the collection of this Society, and at the same time humbly to offer such drawings as are in the Society's collection, but not in that of the King, to be copied for the use of his Majesty". On the 29th March following, the President was able to report that the necessary permission had been obtained, and the Council on the same day resolved "that his Majesty be complimented with the originals of such drawings of the late Major General Roy, as are not at Present in his Majesty's Collection and that Copies of the same be reserved for the use of the Society". But for some reason or another there was considerable delay. Not until a year later (30th March 1792) did the Council order "that Mr. Chamberlain be employed to make copies of those drawings of the late Major General Roy, which are in his Majesty's collection but not in that of the

¹ Minute of Council of 19th May 1792.

Society". Chamberlain was, of course, "the skilled draughtsman of the Tower drawing-room" of whom we have already heard.

The fact that there is still a lack of correspondence between the drawings in B.M. and those in S.A. shows that the scheme of exchange was never carried out in its entirety. Taken along with other indications, it also enables us to form a shrewd idea as to the gaps that would have had to be filled on either side. Thus, it is clear that the Royal Library did not possess a drawing either of 'Rae-dykes near Ury' (plate l) or of 'Re-Dykes near Glenmailen' (plate li). And the explanation of their absence is simple. I have elsewhere¹ gone with some care into the history of both these plans, and have proved that the former was prepared for Mr. Barclay of Ury in 1785 by a land-surveyor named George Brown, while the latter dates from 1788 and is the handiwork of Colonel Shand of Templeland in Aberdeenshire. Neither could have been seen by Roy until twelve or fifteen years after his own collection had been presented to the King. Towards the close of his life they were submitted to him as the leading authority on Roman Scotland. He made a copy of the plan of the Ury camp, and it is doubtless this which is now bound up with B.M., the corresponding drawing in S.A. being Chamberlain's duplicate. On the other hand, there is no copy, in either collection, of the plan of the camp near Glenmailen. It must have reached Roy when he was too busy or too ill to make a transcript of Shand's drawing for himself. We can only suppose that the plate in the *Military Antiquities* was engraved from the original, which was then reclaimed by its owner. A third drawing, which was apparently wanting in the Royal Library, seeing that there is no trace of it in B.M., was that of the plan of 'Tibbers Castle' (plate xlix). An explanation of its absence will be suggested presently.

For obvious reasons it is less easy to determine the extent of the gaps in the Society's collection. But as to one or two of them there is no manner of doubt. Thus the B.M. copy of plate v ('The Polybian system of Castrametation', etc.) has a note in pencil in the margin—"not in the Society's Book". Again, the Minutes of Council of 9th February 1793 record that "Mr. Basire's estimate of thirty guineas for engraving Mr. Chamberlain's drawing of a Sketch of part of the Country along the banks of the River Teme, being Pl. 40 of Gen. Roy's book, was agreed to". It will be remembered that Roy made his drawing of this in the summer of 1772, when the main part of B.M., with the accompanying illustrations, had been already completed,² and when accordingly he had no manner of doubt as to the style that would be most suitable for engraving. This may account for his not having retained a duplicate; his own purposes, whatever they may have been, would be equally well served by keeping, as he

¹ *Proc. Soc. Ant. Scotland*, 1916, pp. 328-31 and 351-4.

² See *supra*, p. 189.

doubtless did, his rough notes and the preliminary draft. Another plate which was unrepresented by any drawing in the collection handed over to the Society was the 'Mappa Britanniae Septentrionalis' (plate i). In S. A. its place is filled by an impression of the later 'state' of the engraving. As the latter is certainly of a date subsequent to Roy's death, it cannot have been among the papers which he left behind him. Perhaps it may have been substituted for the impression of the earlier 'state' now bound up in B. M., which would in that event be one of the "originals" with which the king was "complimented". More doubt surrounds the case of the two maps that immediately follow. Both are now represented in S. A.; but there are indications that both may possibly be copies by Chamberlain. In the 'Mappa|Britanniae|Faciei Romanae|Secundum|Fidem Monumentorum. | Per Veterum. | Depicta. | ex Exemplo. | Ricardi Corinensis. | Amplificata'¹ (plate ii) the attempt to reproduce the ornamental title² is very half-hearted, as if it had been already decided that the engraver was to ignore it. There is clearer evidence as to 'Albion|et|Hibernia|Britannicae Insulae. | Secundum|Claudium Ptolemaeum,| Ex Exemplo Mercatoris|amplificato' (plate iii). The ornamental title³ is, of course, dispensed with altogether, but this is not of itself very convincing. It is more significant that some important names have been left out, while others have been blundered, and that one of the mistakes—'Legio 2 Augusta' for 'Legio 2 Augusta'—is of such a character that it could not have been made by Roy, but must be attributed to a copyist.

The blunders and omissions just referred to were corrected in pencil from B. M. by the Editorial Committee before the S. A. copy was turned over to the engraver. The Committee's activity in regard to the plates betrays itself in various other ways. In one instance they took the bold step of rejecting Roy's drawing altogether. Neither the sepia-washed 'View of Duntocher bridge', which he had specially prepared for engraving, nor the earlier water-colour sketch, which is still preserved in S. A., appeared to them to be suitable for reproduction in the book. It may be that the engraver was responsible for advising rejection. At all events, on 19th May 1792 the Council resolved "that Sir Thomas Dundas Bart. be requested to procure a more accurate drawing of Duntocher Bridge on Grimes Dyke, in order to complete the set of drawings of the late Major General Roy of Roman Military Antiquities in North Britain". Sir Thomas Dundas was the younger brother of Sir Laurence Dundas, proprietor of Castlecary in 1769,⁴ and had succeeded to the baronetcy under a special

¹ In the engraving the original title has been amended by omitting 'Per' and also by leaving out the periods. In the 'List of Plates', however, 'per' has been retained (*Mil. Ant.*, p. 207).

² See *supra*, p. 197. Of course there is always the possibility that the title in S. A. may be Roy's rough draft.

³ See *supra*, p. 198.

⁴ See *supra*, p. 186. *

remainder in the patent.¹ Why the application should have been addressed to him is fairly clear. In those days it was a long way from Duntocher Bridge to Castlecary, and a still longer one to Kerse, the nearest family seat of the Dundases. But Sir Thomas was at this very time a member of the Society's Council,² and probably his colleagues had an idea that he would be specially interested because of his brother's connexion with plate xxxix of the *Military Antiquities*.³ The response to the appeal was not very prompt, for after the lapse of eight months (25th January 1793) we find the Council ordering "that the Secretary be desired to apply to Sir Thomas Dundas Bart. to know what has been done concerning the drawing of Duntocher Bridge". Sir Thomas, however, would seem to have already taken action, if we may judge from the fact that the engraving in the *Military Antiquities* (plate xxxvii), which is copied from a sepia-washed drawing now in S.A., is dated '1792'. It is signed by Joseph Farington, R.A., the well-known landscape-painter. The original, which lacks title, date, and signature, is considerably larger than the copy.⁴

One of the earliest decisions of the Committee must have been to include in the published collection all the available drawings, irrespective of whether they were referred to in the accompanying text or not. Among the drawings which reached them was that of the 'Plan of Tibbers Castle supposed to have been a Roman Camp' (plate xlix), and they had it duly engraved. There was no corresponding drawing in the King's collection, and the Committee probably supposed that Roy had secured the plan at some time subsequent to 1774. As a matter of fact, the camp called Tibbers Castle was not a recent discovery. Its reputation as 'a Roman Castellum' was as old as Gordon's *Itinerarium Septentrionale*,⁵ and it is therefore extremely unlikely that Roy missed the opportunity of planning it in or about 1753.⁶ He had evidently seen it, for he refers to it in the *Military Antiquities* as "a square fort, situated in a remarkable pass, near Disdier Kirk". It is also marked in the original drawing of the 'Mappa Britanniae Septentrionalis', but neither there nor in the text is it definitely associated with the Romans. It may be suggested that the "supposed to have been a Roman camp" of the title indicates Roy's first attitude of mind towards the remains, and that, under the influence of a growing know-

¹ The baronetcy dated from 1762. Thomas was created Baron Dundas of Aske, co. York, in 1794, and was the father of Laurence Dundas, first earl of Zetland. I am indebted to Lyon King for this identification.

² He demitted office on 23rd April 1793.

³ See *supra*, p. 187. It is worth noting that Sir Thomas Dundas was in no way related to General Sir David Dundas, Roy's executor, who was the son of a Robert Dundas, a merchant in Edinburgh.

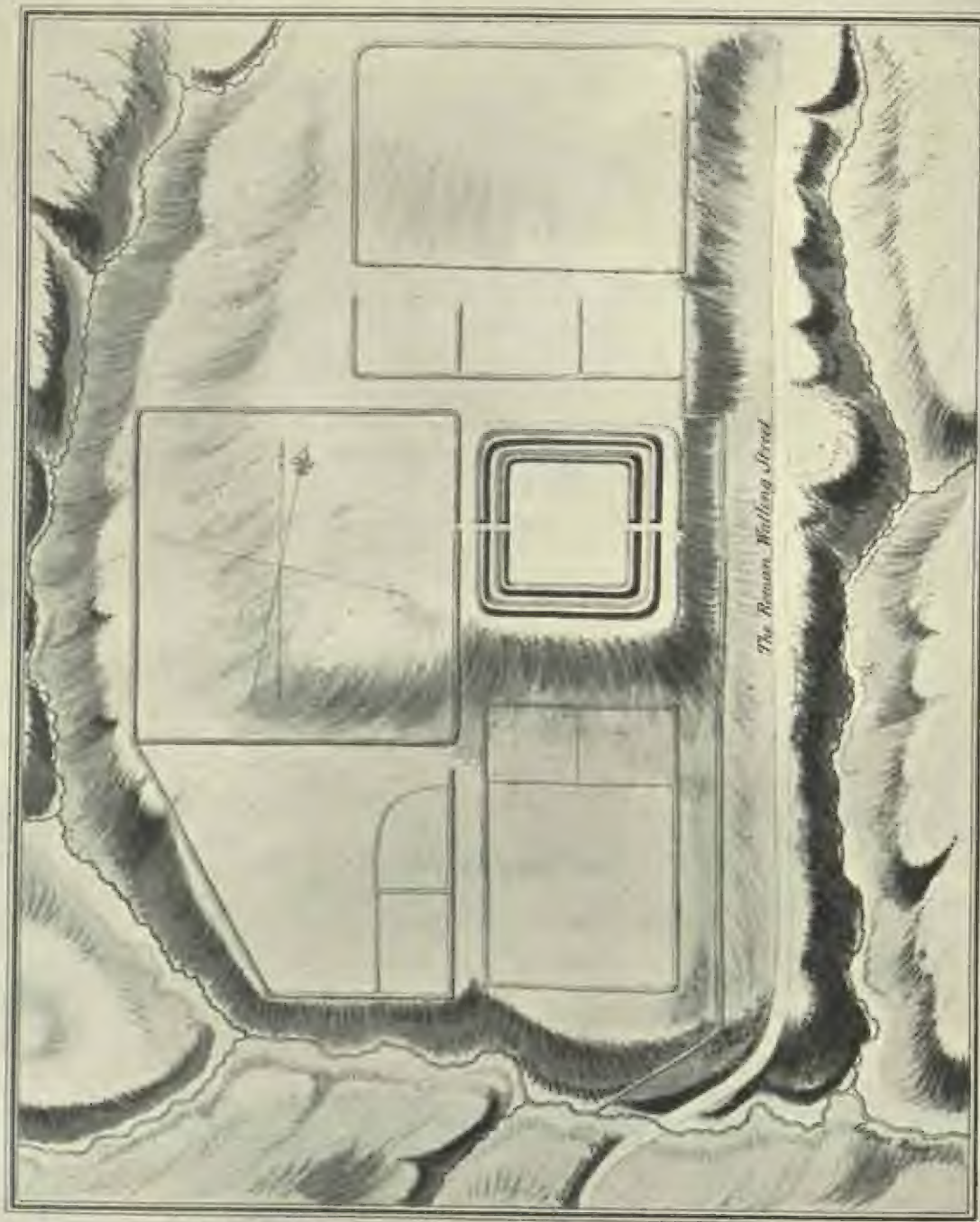
⁴ For details see *infra*, p. 227.

⁵ p. 19.

⁶ See *supra*, p. 168.

⁷ p. 105.

PLAN of the *ROMAN STATION* and adjoining *CAMPS* at Chew Green, on the Head of the River Coquet, on the border between South and North-
Britannia, supposed to be the *FINES* mentioned in *Richard of Cirencester*.



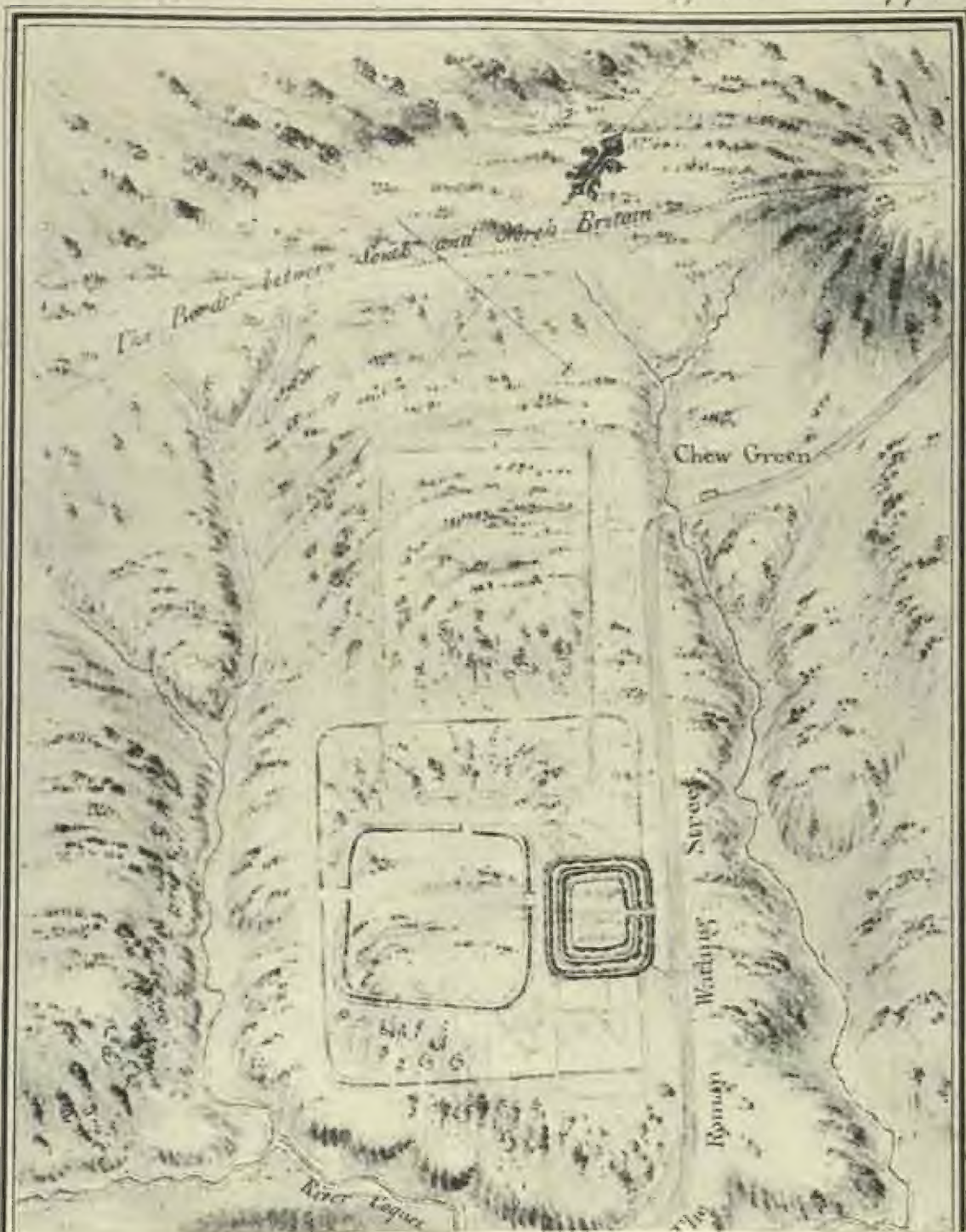
Scale of Roman Feet

Scale of English Feet

ORIGINAL PLAN OF CHEW GREEN

From the British Museum MS.

*PLAN of the ROMAN STATION and adjoining CAMPS at CHEW GREEN
on the HEAD of the RIVER COQUET, on the BORDER between SOUTH
and NORTH BRITAIN, supposed to be the FINES mentioned in
RICHARD of CIRENCESTER. — September 20th 1774.*



REVISED PLAN OF CHEW GREEN

From the Society's MS.

ledge of what a Roman camp was really like, his doubt developed into positive unbelief. If this be so, the exclusion of Tibbers Castle from B. M. was the deliberate act of the author, and its subsequent publication was an error of judgement on the part of the Committee. On the other hand, there was every justification for extending the series by adding the plans of Raedykes (plate l) and of the camp near Glenmailen (plate li), although room should certainly have been found for an explanatory note.

The same may be said of the S. A. drawing containing the plan of Towford and the improved plan of Chew Green (plate xxii). Here the policy of silence was peculiarly unfortunate. Not only was the allusion in the text to Towford—that is, to the locality—allowed to stand without any hint of the discovery of the camp being inserted,¹ but (as we have already seen²) the original description was actually left unchanged. The Committee, in short, failed to appreciate the full significance of the S. A. drawing, which they quite rightly preferred to the older one in B. M. A comparison of the two plans of Chew Green, first with one another and then with plate xxii, will bring curious confirmation of the mechanical fashion in which the editorial work was done. Pl. XXIX is reproduced from B. M. Its bold style may fairly be regarded as typical of the series to which it belongs, and a glance at its content will suggest that Roy did well to be suspicious of its accuracy.³ Pl. XXX is from S. A. Here too the style is typical. The contrast is worth observing, as is also the greater *prima facie* probability of the outline of the entrenchments. The special points to be noted, however, are that pl. XXIX shows two entrances to the multiple-ditched fort, whereas pl. XXX shows only one, and that in pl. XXIX the more westerly of these entrances is exactly opposite the gap in the rampart of the large camp adjoining. If plate xxii, as printed, be next consulted, it will be observed that, so far as this part of the plan is concerned, the engraver has forsaken the guidance of S. A., which in all other respects he follows implicitly. That is, he represents the multiple-ditched fort as having two entrances instead of one, while at the same time he makes the gap in the rampart of the adjoining camp much wider than it is in the original. The intervention of the Committee is obviously responsible. In S. A. the second entrance to the multiple-ditched fort has been pencilled in, as can be seen from pl. XXX, if closely scanned. Not realizing that the one plan was intended to supersede the other, the Committee have treated them as complementary, and in their endeavour to effect a reconciliation have succeeded in lending the weight of Roy's authority to one of the mistakes that he was

¹ *Mil. Ant.*, p. 102, where a brief foot-note was all that was required. Another foot-note ought to have been appended to the first paragraph on p. 61, pointing out that the addition of Towford had brought up the number of camps in the "first set" from four to five.

² *Supra*, p. 200.

³ See *supra*, p. 167, foot-note 4.

anxious to eliminate! Their eagerness to bring about an adjustment also led them to tamper with the opening into the adjacent camp. But the pencilled lines by which they meant to indicate that it should be brought farther down have been misunderstood by the engraver, who has simply widened it.

Definite pencilled directions "to add" occur on various B. M. drawings, wherever indeed the Committee deemed it desirable to introduce into the book any feature that was found in B. M. but not in S. A.; but nowhere else is there serious blundering, if we leave out of account the fundamental mistake of taking S. A. as a basis at all. As a matter of fact, the strictly limited interpretation which the Committee read into their remit was an effective protection against positive error. They evidently regarded the text as almost sacrosanct, while even in the case of the plates they only once ventured upon independent action. This was in dealing with the 'Mappa Britanniae Septentrionalis' (plate i), on which they decided to mark the sites of the three camps whose plans they were adding to the series embraced in Roy's original collection. They had Roy's authority, as expressed in the titles, for describing Towford and Raedykes as 'Agricolan'. In the absence of any such definite indication of his view, they did not commit themselves so far in regard to the camp near Glenmailen: they called it simply 'Roman', although there is no reasonable doubt but that Roy himself would have put it to the credit of Agricola. The plate, of course, was already in existence, having been engraved by Cheevers in 1774. It was not included in the bequest to the Society, but passed with the residue of the estate into the possession of Ensign Reynolds. Subsequently, however, it was handed over as a gift, to be used for the purposes of publication. That is the meaning of the note which appears below the title in the later 'state' of the engraving.¹ Like the other additions, it was doubtless the work of Basire. Reynolds, it may be added, had returned from Canada, no longer an ensign, probably in 1789 when the 34th Regiment was brought back, but certainly before the beginning of 1792, on 24th January of which year the Council of the Society ordered: "That leave be given to Capt. Reynolds, Capt. Bisset and Dr. John Lorimer, to inspect the MSS. of the late Major Gen. Roy, and the drawings in the hands of the engraver, agreeably to the request of Lt. Gen. Melvill."²

The mention of Melville in this connexion suggests an inquiry as to why his name does not appear on either of the Committees of supervision; he was

¹ See *supra*, p. 194. Some proofs must have been struck off after the new sites had been inserted but before the note was added, thus constituting an intermediate 'state'. The only example I have seen is in a bound copy of the *Military Antiquities* now in the Map Department of the British Museum (460. G. 11).

² It is not without interest to note that the minute concludes "and likewise to Geo. Chalmers Esq.". It must have been on the evidence picked up then that Chalmers founded his charge against the Society of having paid more heed to 'splendour' than to 'accuracy': see *supra*, p. 164.

a Fellow of the Society and, from the point of view of knowledge of the subject, there was no one so well qualified to act as editor. The reason for his exclusion was, however, a compelling one. He had become totally blind about 1789, the result of injuries received during the successful attack on Guadeloupe some thirty years before.¹ Notwithstanding his infirmity, he seems to have taken an active interest in the project of publication. On no other hypothesis can we account for the solitary instance in which the Editorial Committee assumed the responsibility of emending or adding to the text of the *Military Antiquities*, as they had received it from Roy's executors, or as they had found it in the King's Library. The following are the facts. Page vi of the 'Prefatory Introduction', as printed, has two foot-notes, both referring to Melville. In the first he is spoken of as "lieutenant-general", a description for which there is no authority either in B. M. or in S. A.,² as indeed there could not well be, seeing that his promotion dated from 1777, three or four years after the manuscripts had been finally revised. The second directs attention to the "circumstantial narrative" which he had recently (1789) contributed to Gough's *Camden*, and takes the opportunity of making two "small corrections" which "having been sent too late for the press, were omitted". This latter foot-note is wholly new. There is nothing to correspond to it in either manuscript, and it must have been under Melville's own inspiration that it was introduced as a means of recording trifling *errata* in his "circumstantial narrative".

We gather from the Minutes of the Society's Council that three years had originally been allowed for the engraving of the plates.³ Progress, however, was more rapid than had been anticipated. Before two years had elapsed the Editorial Committee were beginning to feel that the end of the whole enterprise was well within sight. This is evident from the terms of a report which they drew up on 21st February 1793:

"The Committee appointed to superintend the printing the work of the late Major General Roy, and the Engravings belonging thereto; and to report to the Council the most advantageous method of publishing that work; beg leave to state, that the Council having come to a resolution to print the letter-press at the Shakspeare printing office, they had several meetings with Mr. Bulmer the Manager of that office to consider of the size and kind of Paper to be used for the same, and at length, gave directions to Mr. Bulmer to procure the paper to be made by Mr. Whatman according

¹ *Scottish Historical Review*, vol. xiv, p. 125. He survived until 1809, being at the time of his death, with one exception, the oldest general in the British army.

² See *infra*, p. 222.

³ The drawings were handed over to Basire on 23rd May 1791 (see *supra*, p. 210). That the engravings were not expected to be ready until May 1794 is plain from the penultimate sentence of the report quoted immediately below.

to a specimen agreed upon as to dimensions, and fineness, at a certain price viz £3. 17. 0 p^r. Ream.

That in making the Paper, the weight of it proved somewhat greater than was expected; and from an increase of the price of the articles used in making it during the last Summer, the price of the paper was raised by Mr. Whatman 2s. p^r. Ream, viz to £3. 19. 0 p^r. Ream.

That the Paper for the plates was understood by the Committee to be the same as that used for the letter-press, but upon trial by Mr. Basire and Mr. Hixon the Plate Printer additional sizing for that paper was recommended. This occasioned an increase of Weight, and consequently an increase of price, and the charge for that paper now made is £4. 16. 0 p^r. Ream, and the whole amount for the paper is £605. 0. 0, which exceeds the sum estimated by the Committee about £45. They cannot, however, help expressing themselves to be perfectly well satisfied with the paper adapted both to the letter-press and the copper plates (specimens of which they now lay before the council), and have confident expectations that the beauty and Elegance of the work will give general satisfaction; and will amply repay in its price for sale, the additional expence in the charge for paper.

The Committee further beg leave to report to the Council that the most minute and accurate comparison hath been made by Mr. Topham and Mr. Wrighte between the drawings of the late Major General Roy which were presented to this Society and the Copy preserved in his Majesty's Library; and the smallest variations have been adopted in the engravings. The greatest part of the description for the letter press hath likewise been attentively collated and corrected by them; and the remainder will be compleated as soon as the transcript thereof shall be finished. They also correct and Revise the sheets of the Letter-Press and the impressions of the Plates; so as to render the work as perfect as possible. And from the industry used by Mr. Basire in the engravings, and the exertions made in the printing, the work is in that state of forwardness, that the Committee have well founded hopes that it will be ready for delivery to the Members of the Society early in May next, which is a year short of the time allowed by the council to Mr. Basire for engraving the Plates.

All which they submit to the consideration of the Council."

The foregoing report was approved in its entirety by the Council on 22nd February 1793. It is, therefore, the second of the two documents which the Editorial Committee profess to quote on the fifth page of the *Military Antiquities*. Comparison will show that in the act of 'quotation' very considerable liberties have once again been taken with the official record. But the report is interesting chiefly for the light it throws upon the cost of producing the *Military Antiquities*; it tells us exactly how much money was spent upon the paper. It will be remembered that the estimate for engraving plate xl¹ was thirty guineas. From another entry in the Council's Minutes² we gather

¹ See *supra*, p. 212.

² Under date 16th April 1793.

that the corresponding estimate for the view of Duntocher Bridge (plate xxxvii) was sixteen guineas. And on three occasions¹ the Council orders a payment of £100 to the engraver. The first two of these payments are specifically called 'advances'. Even the third by no means represents the final settlement. From the fact that it was not made until the whole of the work was done, one might be disposed to conclude that it was the last instalment. But it is said to be "on account", and besides, a total of £300 would mean an average of only £6 per plate, whereas the estimates for plate xxxvii and plate xl were sixteen and thirty guineas respectively. Unfortunately, no other figures are available in connexion with the illustrations. The position as regards the printing is even more obscure, since the charge for it does not seem to have been recorded as a separate account. The paper is thus the one item in regard to which we are fully informed. At first sight the outlay upon this strikes one as extraordinarily large, so large as to suggest the possibility of its having covered the printing too. From an expert calculation, however, it would appear that, at the stated price per ream, £605 worth of paper would be required for an edition of 700 or 750 copies of the book,² and we shall find that in all probability that was about the number actually issued.

On 16th April 1793 the Editorial Committee were able to report to the Council that their task was completed, and that "they apprehend that a sufficient number of Copies may be ready to be delivered to the members, on Thursday the 2d of May next; and that the General publication may commence on Thursday the 16th of May". The Council approved the report, and ordered announcement to be made accordingly. Every contributing Fellow who had paid his subscription to the 25th of December 1792 was to be entitled to receive a copy in sheets. For an extra half-crown he could have it stitched in blue paper "in the manner in which the *Archæologia* is delivered to the Members", and for two shillings more he could have it half-bound. According to the list printed at the end of the *Military Antiquities*, this would account for 513 copies. The Honorary Fellows, who were doubtless included in the distribution, would absorb another sixty. In addition, nine were presented, the recipients being the King, the Queen, the British Museum, the Royal Society, the University of Oxford, the University of Cambridge, Roy's two executors, Dundas and Livingstone, and his heir, Captain Reynolds. The surplus copies—their number is unspecified, but it may reasonably be supposed to have been between 100

¹ 30th March 1792, 25th January 1793, and 16th April 1793.

² I have to thank Mr. James J. MacLehose, LL.D., for advising me on this point. He adds that the book "is printed, approximately, on an Imperial paper of about 70 lbs. weight per ream. The price of that paper now, in ledger quality, is, according to the last list I have and which is a few months old, £8 3s. 3d. a ream." To-day, therefore, the paper would have cost the Society about £1,200.

and 200—were ordered to be sold to the public "at the price of five Guineas for each copy in Sheets".¹ They cannot have been all disposed of immediately. On 26th June 1794 a copy "bound in Russian" was presented to the University of Göttingen. Similarly, on 21st January 1795 a copy "extra bound" was presented to the Pope for the Vatican Library, apparently in response to a request. It seems peculiarly fitting that an example of the *Military Antiquities* should thus early have found a resting-place in Rome. The book as it stands is a worthy monument of one whose enthusiasm as an antiquary was matched by his success as a practical soldier and his distinction as a man of science. And there is a singular attraction about the personality that shines through his pages. The concluding words of the 'Prefatory Introduction' are admirably characteristic:

"Improvements of every kind advance by slow degrees; and it is not until the first hints have been communicated to, and examined by many, that they are gradually brought nearer to perfection. Though in these Essays some new lights will be thrown on the temporary castrametation of the Romans, and the ancient geography of North Britain, yet there may still be found room for improvement. Some points the author may have mistaken entirely; and, in endeavouring to establish others, he may have leant too much to the probability of his own conjectures. If, therefore, from future discoveries of Roman works, or the better judgment of those who may choose to amuse themselves in researches of this kind, there should be found reason to depart wholly from, or to alter in any essential degree, his conclusions, the author's views will be sufficiently answered in having induced others to undertake the subject, and contribute towards its perfection."

¹ The circumstance that these and other copies were issued loose explains why it is always advisable for purchasers of the *Military Antiquities* to make sure that the set of plates is complete.

APPENDIX

A complete record of the results of the collation of B. M. and S. A. would serve no useful purpose. The following notes are accordingly limited to a brief general description of the two manuscripts, supplementary to that given above, and to a statement of the more important differences between them, particularly those on which the conclusions reached in the foregoing paper are based. References to the printed book are indicated by the abbreviation '*Mil. Ant.*'

VOLUME I (TEXT)

In B. M. the leaf which holds the title-page (fig. 1, *supra*, p. 191) is followed by a leaf on the *recto* of which is: 'To | The King | This Collection | is humbly dedicated | by | His Majesty's | Most Dutiful Servant | and | Faithful Subject | William Roy | Deputy Quarter Master General of the Forces'. These are succeeded by eight leaves, pp. 'i'-'xv' of which contain the 'Prefatory Introduction'. The next four pages, which are unnumbered, hold the 'General Table of Contents', ingeniously arranged so as to show the logical connexion of the whole, and giving references to the pages of the manuscript. Then comes an unnumbered leaf with the title of Book I on the *recto*, and finally the main body of the work on pp. '1'-'263', with '125 a', '126 a', '125 b' and '126 b', and with unpagged leaves inserted bearing the titles of the books.

S. A. has neither title-page nor dedication. It opens with two leaves, on the first three (unnumbered) pages of which is the 'General Table of Contents', where, however, no references to the pages of the manuscript are given. Thereafter the paging is continuous from '1' to '286', the 'Prefatory Introduction' being called 'Introduction' only, and the leaves which bear titles being included in the numbering. The S. A. original of plate xliii has been bound up *per incuriam* at the end of Appendix II.

The following are typical instances of the kind of evidence that has rendered it possible to determine the chronological relation, etc., of the two manuscripts:

(a) *Mil. Ant.*, p. 129, l. 32, is very instructive. The scribe of B. M. (p. 165) has clearly been puzzled by the unfamiliar word 'septs' in the draft from which he was copying, and he has omitted both it and the 'of' which immediately follows, leaving a blank space. The missing words are filled in in Roy's own handwriting; the 'p' is so characteristic that no mistake is possible, and the ink is also quite different. In S. A. (p. 186) 'septs' is written *currente calamo*. The treatment of 'of' is curious. In B. M. it projects into the margin, the blank space being at the end of a line. In S. A. it is crowded in between 'septs' and the word that follows, different ink being used. It looks as if Roy had accidentally left it out in his original revision of B. M., had noted that it was wanting in S. A., had referred to B. M. once more, and had found that it required to be supplied there also. Otherwise he would have endeavoured to get both words into the blank space which the scribe of B. M. had left for them.

(b) In B. M., up to about Book II, c. 2, foreign words are usually written in the same size of lettering as the rest of the text. When that point had been reached, Roy apparently decided that they should be made very much larger, and this decision is consistently adhered to thenceforward. In S. A. the large lettering for Latin and French words is used throughout.

(c) Similarly, up to the point stated, numbers are generally written in words in B. M., while figures are used thereafter. S. A. employs figures throughout. Thus B. M. (p. vii, foot-note) has 'two or three', where S. A. (p. 7) has '2 or 3'.

(d) In addition to (a) there are several examples of additions or corrections which are made in darker ink in B. M., and possibly in Roy's hand, being written *currente calamo* in S. A. On p. 228 of B. M., for instance (*Mil. Ant.*, p. 180, l. 10), the words "the cohorts were fewer in number than the" have originally been left out: they are inserted above the line in a different hand. In S. A. (p. 250) there is no break in the sense.

(e) The insertion of one or more complete lines that have been accidentally 'dropped' is not unknown even in B. M. (e.g. p. 35), but it is much more frequent in S. A. (e.g. pp. 68 f., 154, 263, 281). It is indicated by the appearance of three or more lines, in the copyist's hand but in smaller characters than the rest of the page, written over an erasure.

(f) A few characteristic examples will serve to illustrate the unintelligent nature of the work of the scribe of S. A. In the following quotations the use of square brackets signifies that the letters or words enclosed have been filled in above the line, on revision, in a different hand, which is almost certainly Roy's own: "[im]perceptibly" (p. 9), "half a [farthing] sterling money" (p. 53, foot-note), "Center of the [country of the] Damnii" (p. 178). On p. 196 the blunder 'SALOLINA' has passed undetected; the name is correctly spelt in the corresponding place in B. M. (p. 174).

(g) Mistakes such as those cited in (f) are rare in B. M., although on p. 3 "kine" has had to be corrected into "kind". That B. M. received a final revision at the author's hands after S. A. had been copied from it is placed beyond doubt by the following facts:

(1) *Mil. Ant.*, p. ii, l. 33, reads "obliterated", and with this S. A. (p. 3) agrees. B. M. (p. iii), however, shows an erasure with "levelled" written over it, apparently in Roy's hand. The Editorial Committee have not noticed the improvement.

(2) *Mil. Ant.*, p. vi, foot-note*. B. M. has originally read "Capt. Melvill then of the 25 Regt. since Governour of Grenada". S. A. is identical but for 'Melville' and 'Regmt.'. In B. M., however, there has been added later '& M: Genl. in the W. Indies', the entry being in much darker ink. For the significance of this, and for comparison with *Mil. Ant.*, see *supra*, p. 217. (*Mil. Ant.*, p. vi, foot-note†, is not found at all in B. M. In S. A. it is crowded in at the foot of the page in a different hand. It can hardly be earlier than *circa* 1792: see *supra*, p. 217).

(3) *Mil. Ant.*, p. 51, foot-note*. The last sentence does not appear at all in S. A. (p. 78), being found only in B. M. (p. 58). For explanation, see *supra*, p. 205.

(4) *Mil. Ant.*, p. 204. In S. A. (p. 282) there is no signature, and place and date are inserted in the scribe's hand. B. M. (p. 261) has all three, but in a hand quite different from the text. It seems possible that the mention of place and date was introduced before S. A. was copied from B. M., while the signature was not added till the final revision.

(5) In two places in S. A. (p. 78 and p. 268) the number of a plate to which reference is made in the text is left blank. In both passages B. M. (p. 58 and p. 247) has the number duly inserted in darker ink.

(6) As stated *supra*, p. 192, the references to plates and to ancient authors, which appear as insets in *Mil. Ant.*, are not found at all in S. A. In B. M. they have been added in the margin in a different hand and in much darker ink. Probably they belong to the final revision.

VOLUME II (PLATES).

To what has already been said in the way of general description of the differences between the second volume of B. M. and the second volume of S. A., it seems necessary to add only that S. A. has no title-page and no manuscript 'List of the Drawings', the place of the latter being taken by a spare sheet of the printed 'List of Plates' from *Mil. Ant.* Some of the details are, however, so important that it is desirable to take the plates *seriatim*:

PLATE i (*Mappa Britanniae Septentrionalis*). This has already been very fully discussed (*supra*, pp. 200 ff.). It will be remembered that there is no original drawing in S. A.

PLATE ii (*Mappa Britanniae, etc.*). As to the title, see *supra*, p. 213. The suggestion there made as to S. A. being a copy by Chamberlain is to some extent confirmed by the circumstance that the Committee have had to pencil several emendations upon it, e.g. 'Auftrinum' has been corrected into 'Austrinum' and 'Epidiae' into 'Epidia', while 'Hardinii', 'Dunum', and 'Logia Flu.' have been added. The engraver of *Mil. Ant.* has converted 'Logia' into 'Bogia'.

PLATE iii (*Albion et Hibernia, etc.*). While B. M. alone has the title decorated (see *supra*, p. 198, fig. 5), S. A. has it in the upper left-hand corner in a plain rectangular framework, and not above as *Mil. Ant.* That S. A. is a copy made from B. M., either by Chamberlain or by some one else who was unfamiliar with the names, seems quite certain from the large number of emendations made in pencil by the Editorial Committee. 'Rutupia' [*sic*], 'Phileum', 'Vodiae', and 'Maramanis Portus' have all had to be added, and the following mistakes in spelling corrected: 'Nagnatae Urbs', 'Catnractionium', 'Antivestaum', 'Aqua Calida', 'Legio = Augusta', and 'Moricumbe'. In B. M. the subdivisions of the degrees of latitude and longitude round the margin are alternately blank and shaded, giving the border a chequered appearance. In S. A. they are all blank, as in *Mil. Ant.*

PLATE iv (*Polybian Camp*). No difference of importance.

PLATE v (*Polybian Castrametation*). S. A. is a copy of B. M. by Chamberlain: see *supra*, p. 212.

PLATE vi (*Channelkirk*). B. M. and S. A. differ from *Mil. Ant.* in having the plan placed upright on the page, so that it can be looked at without turning the book round. In other respects S. A. agrees with *Mil. Ant.*, both having title and scale (single) in inset in lower right-hand corner. In B. M. the title is above the drawing, and the scale (double) is beneath it, while the space thus vacated is occupied by the following note: "This Camp is the only one of the kind hitherto discovered in the eastern communication, and has been supposed to contain one Division, or about half of Agricola's Army, which accordingly had been supposed to advance in two Columns. This however may be thought a doubtful point. For as there is ground sufficient for a large Camp If [*sic*] the single existing Gate, instead of belonging to the side, was that usually found in the end, the Camp might have been of the large kind extending southward to the brow of the Hill that overlooks the River Lauder. On this supposition the Camps in the Western Communication must be considered as those occupied by a Division of the Army that had returned southward on some future occasion." A pencilled direction in the margin, by the Committee, says "to add". But this has not been done, either through an oversight on the part of the engraver, or because it was timeously observed that the whole point of the note was destroyed by the subsequent discovery of Towford. Incidentally we have here a further proof that B. M. left Roy's hands before September 1774 (see *supra*, p. 202). Minor differences are that B. M. has 'Oxton Water' as against 'Oxton Burn', and 'Turn^{pk}. Road from Edinburgh' as against 'Turnpike Road to Edinburgh'.

PLATE vii (*Torwood Moor*). S. A. agrees with *Mil. Ant.* B. M. omits the date '1769', but

has the scale double. Instead of 'River Annan', it has 'Annan River' written in the opposite direction.

PLATE viii (*Tassies-Holm, etc.*). While S. A. agrees with *Mil. Ant.*, B. M. has double scales, and has the title divided into two parts, the second coming immediately above the plan to which it refers. The subsidiary titles are, of course, dispensed with, and the words 'to which is annexed' omitted.

PLATE ix (*Cleghorn*). B. M., S. A., and *Mil. Ant.* are in general agreement here, except that in B. M. the scales are placed beneath. This is one of the very few drawings that have a double scale in S. A.

PLATE x (*Ardoch*). B. M., which has a double scale, omits the date, and also the name 'Kier Burn'. Otherwise there are no important differences of detail, although the names sometimes read in opposite directions. (On the original drawing of this in the King's Library, l. 79, 2 a, the name 'Lindum' is naturally not used.)

PLATE xi (*Dalginross*). Apart from the usual contrast of colouring and detail, there is virtually no difference except a trifling one in the arrangement of the titles of the scales. (The original drawing in the King's Library, l. 79, 3, is very like S. A., except that the small sketch of the gateway is inserted in the upper left-hand corner. It is entitled 'Plan of the Roman Camp at Dalginross near Combrea Kirk in Glenearn', and has the signature 'surv^d 1755 by Will. Roy'. The name 'Victoria' does not appear.)

PLATE xii (*Grassy Walls, etc.*). The stylistic contrast between B. M. and S. A. is very marked here, the names being much more prominent in the former. The title is enclosed in a large wreath-border, and placed, inside the framework, north of the river, in the large space shown as moorland on lower right-hand side of S. A. In the upper left-hand corner, within a triangular framework of branches and foliage, is a double scale, and beneath it, "N.B. The camp was discovered and this Plan was made August the 21st 1771".

PLATE xiii (*Battledykes*). Besides the usual difference in style, the only points calling for remark are that B. M. is undated, and that it has a double scale.

PLATE xiv (*Keithick, Kirkboddo, and Lintrose*). While S. A. and *Mil. Ant.* are in virtual agreement, the arrangement of the two lower plans in B. M. is entirely different. Kirkboddo is placed horizontally beneath Keithick, and Lintrose horizontally beneath Kirkboddo, more ground being shown to left and right on each, so as to make them extend the same distance across the page as Keithick, and the names being at the same time turned through an angle of 90°. Room for the change is gained by dispensing, in all three cases, with the narrow border at the top, containing the title, and by transferring the title to the body of each plan. The scale is double, as is usual with B. M., and extends to 2,100 ft.

PLATE xv (*Roman Castrametation, etc.*). There is no material difference here.

PLATE xvi (*Birrenswork*). *Mil. Ant.* is closely copied from S. A., but omits the name 'Watling Street a Roman Way', which is there attached to the road in the lower left-hand corner. B. M. calls the road simply 'The Roman Way', but the Editorial Committee have deleted 'The' in pencil, and inserted in the margin 'Watling Street a'. Clearly, therefore, the engraver is responsible for the omission. It should be added that the scale in B. M. is double.

PLATE xvii (*Kreiginthorp and Reycross*). *Mil. Ant.* agrees generally with S. A., except that the words 'Roman Camp' do not appear in the body of either plan in the latter. They have been borrowed from B. M. In several other respects the latter differs markedly from S. A., the changes representing a considerable improvement. While the position of the two plans is reversed, Kreiginthorp being on the left and Reycross on the right, the scale in each case is about one and a half times as large, proportionately less ground being shown. At the same time the marginal titles are omitted and the common title done away with, an

independent title being placed immediately above each plan. As usual, a double scale is given.

PLATE xviii (*Inchtuthil*). B. M. differs from *Mil. Ant.* and S. A. in having the title and the scale, which is double, placed in the inset in the centre below, instead of merely the (single) scale. Further, they are surrounded by an ornamental border of shells and palm-branches. The inset in lower left-hand corner is the same in all, except that in B. M. the scale, which is single here also, is placed between plan and section.

PLATE xix (*Ardoch, etc., and Fortingaul*). There is general agreement in respect of Fortingaul, except that B. M. and *Mil. Ant.* have 'a Ditch', 'a Stone', and 'a Stone' at three points where S. A. has merely marks. It is otherwise with the plan showing the relative positions of Ardoch, etc. There B. M. and S. A. differ widely, B. M. omitting as irrelevant one or two names that figure in S. A., and adding quite a number of new ones ('Glnabriccan', 'E. Dealgin Ross', 'Dealgin Ross, Camp of the 9th Legion', 'Victoria', 'Inverpafry', 'Hierna', 'Grinnan Hill', 'Lindum', 'Kaims Castle', etc.). These latter have been transferred by the engraver, sometimes blunderingly, from B. M. to *Mil. Ant.* Finally, B. M. introduces a 'Scale of 4000 yards' between the two scales of miles found in S. A. and *Mil. Ant.*

PLATE xx (*Strathmore*). B. M. represents a very great advance upon S. A. in respect of clearness. Not only is the shading much bolder and more distinct, but a good many irrelevant names have been omitted. At the same time a few new names have been inserted, e. g. 'Skirt of the Grampian Mountains', 'Gothlaw Hill', and the description 'Agricola's Camp' for two of the three enclosures. A 'Scale of 11,000 yards' has also been added between the two scales of miles. *Mil. Ant.* adheres generally to S. A., but adopts some of the new names from B. M.

PLATE xxi (*Eildon Hills*). S. A. corresponds to *Mil. Ant.*, except that there is no blank space between the two drawings, which are separated only by a marginal line common to both, the title of the view of the Eildons being placed beneath this line, i. e. on the sky. In regard to this matter of arrangement B. M. agrees so far with S. A., but it has the title of the view of the Eildons placed below, outside the framework. Beneath the lower title is a 'Scale of 3000 yards for the Map of the Country'. Further, B. M. omits one or two names like 'Toftfield' and 'Brimerside' (= Bemersyde), and inserts 'Road from Selkirk'.

PLATE xxii (*Chew Green, etc.*). The very important differences that betray themselves here have already been discussed. It has only to be added that, while S. A. agrees exactly with *Mil. Ant.* in the matter of arrangement, the plan of Chew Green is on the left hand in B. M., and the plan of the Pass through the Cheviots on the right. A pencil note on the margin of B. M. says "Border Line omitted", i. e. from the plan of Chew Green. As a matter of fact, the difference of scale is the reason for its exclusion, as can be seen by comparing pl. XXIX and pl. XXX, *supra*.

PLATE xxiii (*Liddel Moat*). The only variation between *Mil. Ant.* and S. A. is that the former adds 'to Netherby' after 'Roman Way'. In B. M. the plan has been turned completely round, thus bringing the points of the compass into the conventional position and making the river appear above the Moat instead of below it. The sections have naturally been transposed from right to left to suit the altered position of the plan. At the same time they are more carefully and artistically finished, and are separated from one another by a marginal line. The road is called 'Roman Way from Netherby'.

PLATE xxiv (*Birrens*). S. A. corresponds generally to *Mil. Ant.* But 'Section on the line AB' is omitted, and the line AB is not shown at all on the plan. Further, the actual section is much deeper and has originally had no shading at the right-hand side. The shading has been added in pencil by the Committee from B. M., and a pencil line drawn with a ruler, cutting off the superfluous portion of the section so as to bring it into agreement with B. M.

The plan in B. M. shows about 100 more Roman feet on the left side, and differs slightly as to the details of some of the interior buildings. The scale, which is double, is placed beneath the framework of the whole.

PLATE XXV (*Lower Annandale*). S. A. corresponds generally with *Mil. Ant.*, except that the latter borrows the names 'Blatum Bulgium' and 'Birrens' from B. M. The superior clearness of B. M. is very marked, as is usually the case with 'general maps'. It also shows a double scale of feet (Roman and English) between the two scales of miles, and has the description 'Agricola's Camp' attached to the entrenchment on Torwood Moor. The spelling 'Birrengaul Moor', as against 'Berngaw Moor' in S. A. and *Mil. Ant.*, is noteworthy.

PLATE XXVI (*Castle G'er*). S. A. and *Mil. Ant.* are in agreement. In B. M. the points of the compass (which are placed in the lower right-hand corner) have a quite different orientation, the N. and S. line being upright instead of inclined towards the right; erasures show that the orientation was originally the same, and the difference therefore is deliberate. Again, both of the sections are carried right across the breadth of the enclosing framework, and the upper one is designated *CD*, the lower one *AB*. Lastly, the scale is double.

PLATE XXVII (*Castledykes, and Environs of Lanark*). B. M., S. A., and *Mil. Ant.* agree generally as to the uppermost of the two drawings. In the lower one, besides the usual differences, B. M. has 'Castle Dykes, a Roman Station', and the description 'Roman Camp' attached to Cleghorn, neither of which is found in S. A., although the former appears in *Mil. Ant.* The title, while still in the lower left-hand corner, is within a slightly ornamented border, and the scale is called 'Scale of 2000 yards for the Map of the Country'.

PLATE XXVIII (*Lyne*). No differences seem worthy of note here, except that B. M. has a double scale.

PLATE XXIX (*Camelon*). S. A. is identical with *Mil. Ant.*, except that 'a Roman Station' has been borrowed from B. M. In B. M., however, the connexion of the description with Camelon is quite clear, whereas in *Mil. Ant.* the addition is made in small letters and in such an unintelligent fashion that its full bearing is not at once obvious. Instead of 'Old Course of the Carron', as in S. A. and *Mil. Ant.*, B. M. has 'The Carron has formerly taken its course along the foot of the Bank'; and, instead of 'Roman Way leading from the Wall through Camelon towards Stirling and Ardoch', it has simply 'Roman Way from Alauna', written in the opposite direction. The scale is double.

PLATE XXX (*Ardoch*). *Mil. Ant.* differs from S. A. only by borrowing 'Praetorium' from B. M. The latter has the scale double, and has 'Praetorium' in fairly large letters, but shows none of the other names. (l. 79, 2 b in the King's Library is a similar plan, entitled 'Plan of the Roman Post at Ardoch in Strathallan', and signed 'Will. Roy, July, 1755'.)

PLATE XXXI (*Posts near Ardoch*). The only difference here is a difference of arrangement. In B. M. the six drawings and sections, which are grouped together in S. A., are moved apart so that each becomes independent of the other. At the same time the common title is done away with and a separate title placed above each of the three left-hand compartments. In the case of the three on the right hand the titles are placed above, but within the framework in each case. (l. 79, 2 a of the King's Library, which is unsigned and undated, but which may nevertheless be confidently attributed to Roy and to 1755, has on one and the same sheet a drawing which is clearly the original of plate x, and to the right of it the three plans of plate xxxi, so arranged that Kaim's Castle is at the bottom instead of at the top. The whole sheet has the general title 'Plan of the Roman Posts and Camps near Ardoch in Strathallan'; no sections are shown.)

PLATE XXXII (*Strageth*). *Mil. Ant.* is obviously modelled on S. A. The latter, however, has only a single section. This is the horizontal one; but it is unlettered, and there is no

dotted line upon the plan to indicate its position. An 's' has been added in pencil to 'Section' in the title. S. A. is also without 'Roman Way from Lindum to Orrea', which has been transferred to *Mil. Ant.* from B. M. In B. M. the plan is turned round 90° so as to be upright on the page. It has a double scale, and has transverse lines for sections, lettered as in *Mil. Ant.* The sections beneath, however, are arranged $\begin{smallmatrix} AB \\ CD \end{smallmatrix}$, not $\begin{smallmatrix} CD \\ AB \end{smallmatrix}$.

Rather less of the streamlet that flows N. in the lower right-hand corner is marked. (l. 83, 3 of the King's Library, which is entitled 'Plan of the Roman Post at Strageth near Inverpeffery in Strathearn, July 1755', and is signed 'Will. Roy', is the original of S. A. The correspondence is almost exact, except that the single section is lettered *AB* and its position indicated by a line on the plan, while the scale is placed between the plan and the section.)

PLATE xxxiii (*Burghead*). S. A. is practically the same as *Mil. Ant.* B. M. occupies rather less space on the page, owing to a reduction of the amount of sky shown in all three compartments. The double scale for the plan is placed, not below the whole, but in the lower left-hand corner of the uppermost compartment, on the sea, its place beneath being taken by a double scale for the sections.

PLATE xxxiv (*Moray Firth, etc.*). It is plain from the relief that S. A. has served as the basis of *Mil. Ant.* But many details have been introduced from B. M.—the line of longitude, the parallel of latitude, a number of names, e. g. 'Willie Wakum and Spadilingum, Large Cairns, etc.', 'Entrance into Cromartie Bay', 'Sands of Cubin', etc. It is worth noting that, while *Mil. Ant.* has 'Forres' in the title and S. A. 'Forress', B. M. agrees with the 'List of Plates' in spelling 'Foress'.

PLATE xxxv (*Antonine Wall*). *Mil. Ant.* has been copied from S. A., but omits 'July' before '1755' in the title, although the name of the month is found also in B. M. One or two additional names occur in B. M., and have been introduced thence into *Mil. Ant.*, e. g. 'Newlands', which is inserted in pencil in S. A. A smaller sheet is used for S. A.

PLATE xxxvi (*Arthur's Oon*). See *supra*, p. 199. S. A. is a water-colour drawing. The lower half bears the title 'Plan of Arthur's Oven Vulgarly called Oon', and has no lettering inside the dotted circle. *Mil. Ant.* takes the title (inserting 'the' before 'Top') and the legend inside the dotted circle from B. M., but leaves the scale single as in S. A., although it is double in B. M.

PLATE xxxvii (*Duntocher Bridge*). To what has already been said regarding the three drawings for this plate (*supra*, pp. 213 f.), it has to be added that the engraver, while following generally the guidance of Farington's sketch, has reproduced only the central part of it. Consequently the engraving measures no more than 14" × 10", while the drawing measures 19½" × 13". The figures of a man and a woman standing on the bridge have also been omitted.

PLATE xxxviii (*Auchendavy Altars, etc.*). There is no difference of importance between B. M., S. A., and *Mil. Ant.*

PLATE xxxix (*Castlecary Bath, etc.*). Again there is no substantial difference except in the title, where *Mil. Ant.* follows S. A.; see *supra*, p. 187, foot-note 3. But there are two blunders in S. A.; the uppermost sub-title has 'raisedy', which is corrected in pencil into 'raised by', while in the scale for one of the plans (fig. 2 d) 'Roglish' for 'English' is left uncorrected.

PLATE xl (*River Teme*). As has been mentioned above (p. 212), S. A. is a copy of B. M. by Chamberlain. The differences are, therefore, insignificant.

PLATE xli (*Hyginian Castrametation*). S. A. has all the superior finish which characterizes the B. M. drawings of this class, whereas B. M. is in the style generally associated with S. A.

drawings of a similar kind. There has clearly been an accidental interchange. The interchange took place, however, before B. M. was placed in the King's Library at all, for both drawings are numbered in red ink, this being the only instance of such numbering in S. A.

PLATE xlii (*Hyginian Camp*). No special remark is called for here.

PLATE xliii (*Hyginian Camp*). In S. A. the place of the drawing is occupied by a printed sheet, while the drawing is bound up in vol. i (see *supra*, p. 221).

PLATE xlv (*Polybian and Hyginian Camps*). The drawings have been sufficiently discussed above (p. 205).

PLATE xlv (*Polybian Camp*). S. A. and B. M. are distinguished only by the usual stylistic differences.

PLATE xlvi (*Netherby Bath*). S. A. corresponds to *Mil. Ant.* A reproduction of B. M. will be found in pl. XXVII, *supra*.

PLATE xlvii (*White Catherthun*). S. A. agrees with *Mil. Ant.*, whereas in B. M. the 'Plan' is placed above the 'View', not beneath it. Further, the scale in B. M. is double.

PLATE xlviii (*Brown Catherthun*). There is general correspondence between all three here, but the scale in B. M. is double.

PLATE xlix (*Tibbers Castle*). Not represented in B. M.: see *supra*, p. 214.

PLATE l (*Raedykes*). S. A. is probably Chamberlain's copy of B. M.: see *supra*, p. 212.

PLATE li (*Glenmailen*). Not represented either in B. M. or in S. A.: see *supra*, p. 212.